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THE CHICAGO MEDICAL EXAMINER,

A MONTHLY JOURNAL DEVOTED TO THE

EDUCATIONAL, SCIENTIFIC, AND PRACTICAL INTERESTS

OF THE

MEDICAL PROFESSION.

EDITED BY

N. S. DAVIS, M.D.,

PROFESSOR OF PRINCIPLES AND PRACTICE OF MEDICINE AND OF CLINICAL MEDICINE, IN THE CHICAGO MEDICAL COLLEGE, ETC., ETC.

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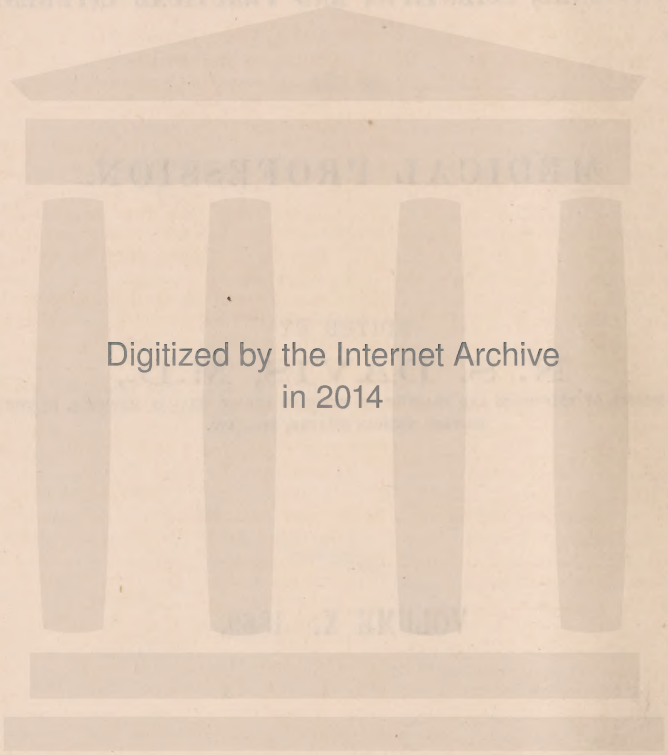

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INDEX TO VOL. X.

PAGE.

Address, Annual to the Montgomery Medical Society, by P. B. Cook, M.D., ---------- 65
Ammonia Muriate in Syphilis, by T. Griffin, M.D., ---------- 13
American Medical Association, 123, 179, 182, 239, 246, 248, 342, 375
Alumni of Chicago Medical College, ----------178, 239, 257, 298
Aphonia, Rebelious cure of,----- 181
Academy of Sciences of Paris,--- 183
Amputation of Arm in Utero, by Mental Emotion,---------- 561
Address, Introductory, by H. W. Boyd, M.D.,---------- 641
Ammonia Muriate, in Ovarian Neuralgia, ---------- 651
Animal Quinoidin, Doctrine of,-- 170
Auscultation and Percussion, Compendium of,---------- 237
Archives de Physiologie, Normale et Pathologique,----------238, 634
Arsenic in Diseases of the Skin,-- 765
Antiseptic Surgery, Sum and Substance of,---------- 732
Aneurism, Treatment of, -------- 751
Ages of the Ancients,---------- 762

Blood, Transfusion of—Succcessful Cure,----------183, 766
Best Book for Everybody,------- 184
Blood-letting, Action of, by Geo. Johnson, M.D., ---------- 234
Bromide Potassa for Sleeplessness of Infants, ---------- 251
Bromides, an Inaugural Thesis,-- 263
Bromide of Ammonium as an Anodyne,---------- 478
Bromide of Potassium in Summer Complaints,----------482, 616
Belladonna in Hooping-Cough,-- 497
Berlin, Letter from, ---------- 666
Bronchitis, Chronic, as Connected with Gout, etc., ---------- 122

PAGE.

Calabar Bean, Extract of,------- 764
Contagion and Utilization,------ 32
Clinical Cases of Continued Fever, 46
Clerical Surgeon,---------- 60
Curvature of Spine, Lateral,----- 77
" " Backward, -- 594
Clinical Reports, Mercy Hospital, 87, 173, 221, 656
Chloroform, Death from, -------- 120
Chloroform in Intermittent Fever, 135
Chloroform, Combination of with Opiates,---------- 746
Conspectus of Medical Sciences,-- 177
College Commencement, -----178, 241
Carbolic Acid, Antidote for,----- 184
Charlton, John, Death of, ------- 240
Convulsions, Puerperal,--------- 249
Correspondence,---------- 310
Catarrhus Vesicæ, ---------- 313
Calcification of Tooth Pulp,----- 315
Creasote in Typhoid Fever,------ 380
Cataract, Cure of, without operation,---------- 439
Carbolic Acid; its Surgical and Therapeutic Uses, ---------- 501
Cholera and Yellow Fever in Cuba, 504
Consumption, Contagion of,------ 505
Chicago Medical College, Medical Dept. N. W. University, ------ 634
Canadian Medical Association,--- 634
Clavicle, Excision of, for Oseto Sarcoma,---------- 653
Cook County Hospital Records,-- 663, 739
Chemical Decomposition Retarded by Pressure,---------- 655
Cattle Diseases, Report on, ------ 690
Cholera, Prevention of its Spread, 694
Club-Foot, Practical Manual on,- 431
Chemistry, Elementary, Manual of, ----------501, 690
Compendium, Half-Yearly,------ 313
Convention, Medical,---------- 437
Criminal Abortions, ---------- 757

15272

PAGE.

Clinical Instruction to Mixed Classes, ---------- 758
Death, a Case of Sudden, ------- 15
Diabetes, Saccharine, Remark on, 94, 314
Dysentery, Chronic, A New Treatment of, ---------- 108
Dental Association, American,--- 111
Dose and Symptom Book,------- 121
Dropsy, Renal, with Convulsions, 193
Dunn, A. A., Death of,---------- 240
Discoveries of Sir Charles Bell,-- 249
Dipsomaniacs, ---------- 250
Drugs and Medicines, Report on,- 391
Digestion, Function of,---------- 432
Doctors, etc., in Paris, ---------- 445
Diarrhœal Diseases of Infants,--- 551
Disinfectant for Purposes of Dissection, ---------- 697

Ectropium Intestinorum,-------- 16
Essentials of the Principles and Practice of Medicine, -------- 176
Errors, ---------- 181
Ear, Diseases of, ---------- 235
East India Opium, ---------- 243
Explanation, ---------- 309
Epilepsy, New Investigations Concerning, ---------- 330
Editors' Association, --------240, 376
Equino-Varus, New Dressing for, 388
Excisions of Head of Femur, Report on,---------- 560
Eye, Diseases of,---------- 560
Eye, Diseases and Injuries of,--- 756
Etherization in Boston, --------- 565
Earle, F. O., Death of,---------- 636
Ergot, Extract of,---------- 762

Fibrous Tumor of Uterus, removed by W. H. Byford, M.D.,---- 1
Fever Intermittent, ---------- 8
" Continued, Strychnine in,- 46
" Lectures on,---------- 52
" Typhoid, Evidence of, 154, 570
Fatty Tumor, Case of, ---------- 84
Female Sexual Organs, Pathological Anatomy of, ---------- 122
Fissure, Anal, Treatment of,----- 176
Fungus, Theory of Disease Doubtful,---------- 182
Fistula, Vesico-Vaginal, -------- 238
Fracture Apparatus, New,------- 282
Fossil Horse, Discovery of,------ 311
Fees in Medical Colleges,-------- 502
Fort Wayne, Letter from,------- 605

PAGE

Florida and the South, a Guide-Book, ---------- 632
Female Students and Physicians, 632
Foreign Gleanings,---------- 695

Gallstone and Cholesterine, Solvent for,---------- 184
Glue, Liquid,---------- 314
Gums, Treatment of,---------- 314
Gynæcological Society, of Boston, 366
Gelsemina, ---------- 427

Hæmatemesis, ---------- 324
Hæmorrhagic Malarial Fever,--- 501
Health-Lift,---------- 181
Herpes Zoster, a Case, ---------- 157
Hip, Dislocations and Fractures of, 691
Heidelberg, Letter from, -------- 602
Health, Board of, in New York,- 561
Hypodermic Injections in Syphilis 455
Hydrate of Chloral, Physiological Action of,---------- 747
Hypodermic Injections in Inertia from Exhaustion, ---------- 389
Hypodermic Injection of Caffeine in Poisoning by Morphia,----- 700
Hemorrhage, Dental,---------- 328
Homœopathy, ---------- 309
Homœopathy, Modern, --------- 766
Horse-Shoe Pessary, Removal of from Female Bladder,-------- 729
Hotel Dieu, Mortality in, ------- 439

Ileitis, a Case, ---------- 577
Indians, Military Surgery Among, 599
Insanity, Report on,---------- 513
Infancy, Hygiene of, ---------- 23
Institution, Royal, ---------- 183
Infancy and Childhood, Diseases of, ---------- 235
Items from the Gazette de Hospateaux, ---------- 693

Jurisprudence, Medical, in Mass. Medical College, ---------- 181
Jurisprudence of Medicine,------ 505

Knoxville, Letter from,---------- 294
Keratitis, ---------- 725

Lexicon, Medical, ---------- 121
Larnyngoscope, Use of, --------- 122
Lithotomy,---------- 137
Life in Depths of Ocean,-------- 171
Locomotor Ataxia, Phosphorus in, 232
Lithotomy, Spontoneous,-------- 313
Law, Medical, in Minnesota, ---- 378

	PAGE.
Lead Poisoning,	438
Lachrymal Affections,	501
Library, National,	563
Lister's Antiseptic Treatment in Surgery,	606
Medical Society, Chicago, 18, 89, 147, 150, 207, 299, 310, 433, 548,	623
Medical Society, Wisconsin State,	36
" " Carroll County, 93, 217,	499
" " Illinois State, 178, 239, 310, 375, 395,	123 691
" " Wayne County,	218
" " Adams County,	310
" " DeWitt County,	339
" " Iowa State,	414
" " Minnesota State,	498
" " Nebraska State,	692
Mortality Reports, 39, 59, 185, 312, 442, 506, 569, 635, 698,	763
Money Receipts, 58, 124, 245,	311
Medical Instruction, Spring and Summer,	123
Microscope, New Mode of Preparing Objects,	250
Medical Vacancies in the Army,	370
Microscopical Society, Ill. State,	378
Medical Institute, Summer,	433
March, Alden, Death of,	436
McNaughton, James, Pres. Albany Medical College,	700
Male Fern in Tænia,	700
Maxilla, Superior, Excision of,	452
Mercy Hospital, 502, 525,	562
Medical Controversies,	502
Medical Colleges, 562,	692
Military Surgery in French Army,	590
Membrana Tympani in Health and Disease,	631
Mineral Waters, Artificial,	682
Muscles, Physical Properties of,	440
Needle, Extraction of,	329
Nature and Time in the Cure of Disease,	237
Nothing New,	57
Nurses, New York Med. College,	58
Obstetrics, Report on,	457
Opium, Its Action on Uterus,	420
Ophthalmic Surgery, Handy-Book of,	757
Opium Habit,	52
Orchitis, Acute,	379
Oxygen Mixture for Inhalation,	284
Ovarian Dropsy, Operation for,	140
Ovary, Microscopic Examination of,	143
Ovariotomy,	183
Organic Life, Forces of,	705
Physicians' Visiting List, 1869,	691
Pathological Specimens, Method of Preserving,	697
Pharmacist,	634
Paris, Letter from,	534
Placenta Previa, Cases,	569
Pyrophosphate of Iron, Preparation of,	430
Pathological Museum of Pennsylvania Hospital,	432
Pancreas, Minute Structure of,	766
Pharmacy, Chicago College of,	413
Pharmaceutical Association, A'm,	433
Paralysis after Chloroform,	438
Pruritus Vulvæ, 445,	762
Prize, Surgical,	314
Purpura and Tetanus, a Case of,	199
Practical Painter,	239
Pennsylvania Hospital Reports,	236
Pensions to Widows of Physicians,	184
Potassa, Permanganate of,	765
Primipara, Aged,	188
Physiology and Hygiene, a Treatise on,	52
Peticolas, Arthur E.,	58
Pseudo-Membraneous Croup, Tracheotomy in,	321
Quacks in London,	184
Quinine, Sweet,	504
Rheumatic Fever, Treatment of,	697
Reply of Dr. Breed to Dr. McElroy,	716
Sulphites as Anthelminitics,	699
Sterility, Pathology and Treatment of,	669
Surgery, Science and Art of,	631
Spine, Backward Curvature of,	594
Soda Sulphis in Fever,	8
Surgeon General's Annual Report,	53
Spirograph,	110
Sanitary Statistics of Chicago,	112
Singular Disease,	313
Sun Stroke, Pathology and Treatment of,	227
Sweating, Excessive,	230
Sterility, Microscope in,	238
Sulphates of Soda, Potassa, etc.,	285
Spectroscope, Last Wonder of, 314,	439

	PAGE.
Syphilis and Local Contagious Disorders,	236
Syphilis, Subcutaneous Injections in,	381
Stevens, Alexander H., Death of,	381
Skin, Structural Lesions of,	432, 628
Skin, Arsenic in Diseases of the,	765
School of Medicine, Kentucky,	434
Smithsonian Institute, Annual Report of,	756
Saccharite of Iron,	441
Small-Pox, Second Attacks of,	249
Troy, Letter from,	664
Tapeworm, Treatment of,	699, 700
Tetanus, Treatment of, Calabar Bean in,	385
Tracheotomy in Croup,	321
Transactions of College Physicians and Surgeons, Philadelphia,	237
Transfusion, Favorable Result of,	766
University of Pennsylvania, History of,	237
Urethra and Urinary Fistula, Pathology and Treatment of Stricture of,	757
Urethroscope,	183
Urinary Organs, Clinical Lectures on Diseaser of,	176
Urine, Retention of, Extraordinary Case,	85
Uterus, Reflex Irritation from the Rectum as a Cause of some Affections of,	371
Vienna, Letter from,	144, 204, 479, 743
Venesection,	238
Vaccination, Protective Power of,	129, 316
Variocele, Treatment of,	449
Vaginismus,	434
Vaginitis,	440
Women, Diseases of,	309
Webster's Dictionery,	316
Water, Impurity of,	505
Water, How to Test the Purity of,	168
Woman, Physical Life of,	689
Women and Children, Hospital for,	562
Warts.	762
Zymotic Diseases, Prevention of,	83

THE

CHICAGO MEDICAL EXAMINER.

N. S. DAVIS, M.D., EDITOR.

VOL. X. JANUARY, 1869. NO. 1.

Original Contributions.

ARTICLE I.

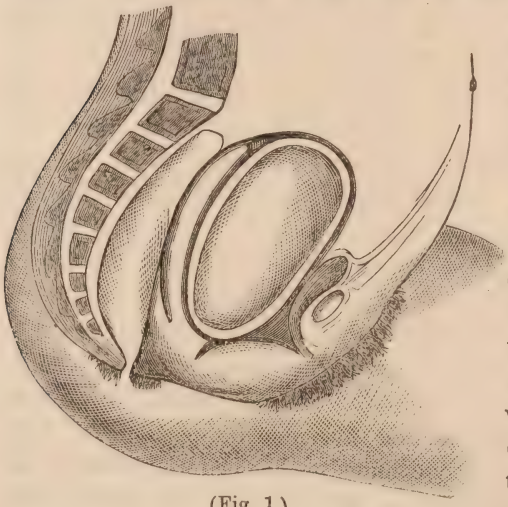
AN INTRA-MURAL FIBROUS TUMOR REMOVED FROM THE ANTERIOR WALL OF THE UTERUS.

BY WILLIAM H. BYFORD, A.M., M.D., Professor of Obstetrics, etc., Chicago Medical College.

Mrs. McC., of Terre Haute, Indiana, is thirty-nine years of age; has been married twenty-one years; has four children, the first nineteen years old, the last eight, and had one miscarriage, twenty years since. Her health has been in every respect good until the last five years. Five years ago, she had severe neuralgic pain in her left side, extending to the hip and down the leg of the same side; from the history, most likely in the sciatic nerve and its branches; for about one month the limb was partially paralyzed. She has since then almost continually been the subject of indigestion, constipation, etc. Eighteen months since, she commenced having profuse discharges of blood from the vagina. These discharges had continued to increase up to the time when Dr. J. B. Buchtel was called to see her, on September 22d, 1868; when, according to the description given by Dr. Buchtel, she was anæmic to an extreme degree, with œdematous face and extremities, and effusion in the peritoneal cavity. She was almost constantly confined to her bed; had pain in the left iliac region, and down the left leg; was constipated, and

vomited a part of her food, and was also much distressed with the digestion of what she retained. Her menses were regular, but profuse; besides this, she had profuse floodings between times, which were controlled only by the most active treatment; sometimes it was necessary to use the tampon. Between the hemorrhages she had profuse leucorrhœa. An examination made by Dr. Buchtel was followed by alarming hemorrhage. By this examination he discovered the presence of a large fibroid growth in the anterior wall of the uterus.

After a skilful and diligent course of treatment, consisting, for the most part, of tonics and alteratives, with good substantial diet, for about four weeks, Dr. Buchtel found his patient able to be brought to Chicago for advice and surgical treatment. October 24th, Mrs. McC.'s health very much improved, but still so feeble that she passed much of the time in bed. She expressed great fear of another paroxysm of hemorrhage. A careful examination confirmed Dr. Buchtel's diagnosis. There was a large, hard tumor imbedded in the anterior wall of the uterus. When the probe was passed into the cavity of that organ, and a catheter in the bladder, their lower extremities crossed each other, while the wide separation of their upper ends showed an intervening substance of about five inches. The lower end of the tumor was about on a level with the arch of the symphisis pubis, and had greatly developed and distended the anterior wall of the cervical part of the uterus, while the upper could be felt high up towards the umbilicus, a little more to the right than to the left of the linea alba.



(Fig. 1.)

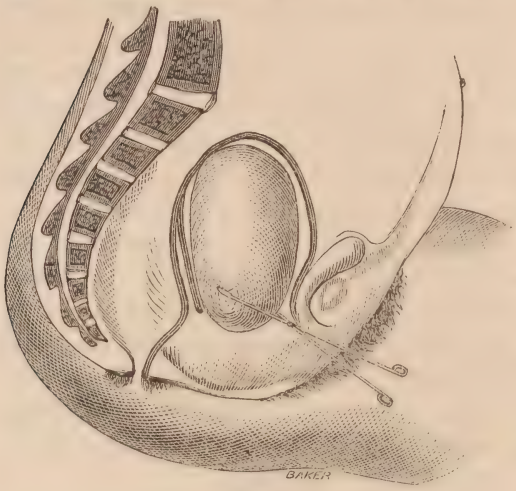
The os uteri was soft and dilated, so that one finger would easily enter it. A good idea of the tumor *in situ* is given in Fig. 1. The bladder is crowded up to the symphisis, and the cavity of the uterus may be seen very greatly elongated behind the tumor.

I hoped to be able to destroy the vitality of the tumor by coring it after the method practised by Mr. Baker Brown, of London. With a view to an attempt of this kind, I placed the patient on the operating-table, on her left side, with her left arm behind her, so that she would lie well over on her breast, with the knees drawn up, the right bent the most, and drawn forward and over the left on the table. This is Sims's position for the operation for vesico-vaginal fistula. The introduction of a large-sized Sims speculum brought the lower end of the tumor full in view. After having anæsthetized the patient, in presence of the students of Chicago Medical College, at Mercy Hospital, assisted by Dr. Buchtel and some of the senior students, I commenced the operation.

An incision was first made in the most dependent part of the tumor, in the anterior lip of the uterus, which extended transversely from one side of the pelvis to the other, and must have been over three inches long; another, commencing in the centre of this, was extended up the posterior surface of the tumor, in the cavity of the uterus, as far as I could guide the scissors by the finger, with the hand partly introduced into the vagina. This last incision must have been more than three inches long also. The substance cut through was at least a quarter of an inch thick. The two incisions formed a ⊥-shaped opening into the cyst containing the tumor. The freedom with which I could separate the walls of the cyst from the tumor encouraged me to attempt the removal of the whole mass, instead of a part of it. For this purpose, I introduced my left hand into the vagina, and my fingers high up into the cyst; and after some exertion, had the satisfaction to break up the adhesions of the tumor to its envelope over much of its circumference, and well up towards the upper end.

I then seized the mass with a strong vulsel forceps, and

made traction upon it in various directions, twisting, with a view to loosen it from its bed, and changing the bearing of the instrument in numerous ways, with apparently but little effect.



(Fig. 2.)

After much fatiguing effort, I passed the forceps up the posterior surface of the tumor, in the manner represented by Fig. 2, and made traction with great force, giving the instrument a swaying motion from side to side. Soon it became evident that the whole tumor was approaching the external orifice of the vagina. Thus I continued passing the forceps higher up from time to time, until, to my great delight, the whole mass engaged in the lower strait of the pelvis, through which it passed, after some resistance. The fingers were then passed up into the cavity of the cyst, in order to ascertain whether there was anything further to be removed. The uterus contracted very decidedly, and became firmer to the touch. I could not detect any other growth by the most careful examination. Not more than two ounces of blood was lost, and the woman exhibited no signs of exhaustion. No more than forty minutes elapsed from the time the patient was placed completely under the influence of ether until she was carried to her bed. No treatment but rest, and opiates enough to allay pain, was directed. Twenty drops of tincture of opium is all the medicines she required or took. There was no symptom requiring attention, but the patient seemed comfortable and cheerful from the time of the operation, and on the 10th of November she made the journey home.

December 1st I received a letter from Dr. Buchtel, saying that his patient was "quite well."

The tumor was fibroid, oval in shape, the small end down. It weighed twenty ounces avoirdupois, was five inches and a half long, four inches and three-quarters broad, and four and a quarter thick. It was so firm in structure, that the forcible efforts at removal did not mutilate it scarcely at all.

REMARKS.—The profession is anxiously collecting facts, and comparing the results, in the treatment of fibroid growths of the uterus, with a view to the formation of rules of practice. Heretofore, and at present, there is very little on the subject of management in reference to them definitively settled. Yet, when we look back for only a few years, we will find there has been progress enough to warrant the expectation that the future treatment of fibroids will be made better than the past.

It is with a view to assist in collecting material upon which to base rational methods of cure in the formidable conditions connected with them, that I record this case, and venture upon these remarks in connection with it. The successful enucleation of intra-mural fibroid tumors of the uterus is acknowledged to be the best mode of treatment, especially when their removal can be done at once; yet most instances are attended with many difficulties and dangers. The principal dangers are—1st, Serious damage to the uterus; 2d, Injury to other viscera, as the bladder, bowel, and peritoneal cavity; 3d, Hemorrhage; 4th, Subsequent inflammation; 5th, Toxæmia.

The most important difficulties—1st, The remote situation of the tumor; 2d, Contracted and undeveloped condition of the os and cervix uteri; 3d, Too great size of the growth to pass through the pelvis and cervix, after the latter is well developed.

I am aware that these are not all the dangers and difficulties met with; for every case will present its own peculiar difficulties; to be surmounted, at the time, by the ingenuity of the operator alone; but I think we have in those above mentioned such as are to be feared in the majority, if not the whole, of the cases operated upon. One of the most important, in fact indis-

pensable, items preparatory to treatment, and which will enable us to avoid much of the dangers, and overcome many of the difficulties, is to definitely determine the relations of the tumor to the different parts of the uterus, the pelvic viscera, and the peritoneal sac.

A few very simple means of exploration are necessary, and, ordinarily, sufficient, for this purpose. The tumor should, in the first place, be pressed down as low in the pelvis as possible; the finger, in the second place, should be introduced as far up into the rectum as practicable; 3d, the probe passed up the cavity of the uterus; and 4th, a catheter introduced into the bladder. If the tumor is in the posterior wall of the organ, the finger and probe will be separated as widely as the thickness of the fibroid intervening. The finger may further determine something of the shape and consistence of the tumor, as also whether it occupies the median or lateral parts of the wall. If the growth is in the anterior wall, then the distance between the probe and catheter determines its size.

The hand pressed down from above in the abdominal cavity, while the probe is in the uterus, will enable us to judge pretty accurately the vertical dimensions. By this sort of exploration we definitely determine the position of the bladder and rectum, and may thus have the knowledge that will guide us clear of them, and point out the places where the peritoneal cavity approaches nearest the field of operation. With this knowledge, a careful operator would not be likely to inflict damage upon any of these organs.

The part of the uterus most in danger is that above the vaginal attachment, as it would seem that the segment ordinarily included in or pressed down into the vagina and developed by the tumor, will suffer almost any practicable mutilation, and recover from it without danger to life. It may be extensively excised and largely distended without serious hemorrhage, or other detriment resulting, as this and many other cases on record prove. If the vaginal portion is opened by incision or otherwise, so that the operator has free access to the cavity in which the tumor is imbedded, the uterine walls will bear great freedom

of manipulation, on account of both their great elasticity and strength; for they are generally much hypertrophied.

The most distended portion of uterine tissue, in the case reported, was one-fourth of an inch thick; and it is reasonable to suppose that this part was not thicker than elsewhere. I think it may now be considered as true, that in very few cases is the danger from hemorrhage great; yet we should ever be watchful against the possibility of the contrary. The free use of iron, pulverized rhatany, cold, and, if need be, the tampon, are the resources available and effective. Nor does there seem to be just grounds for suspecting that the operation for enucleation and avulsion of these tumors will be followed by more violent or dangerous inflammation than amputations or other capital operations. The means of avoiding it are, to establish the best possible condition of health, by the administration of iron, nourishing diet, and cod-liver oil, before the operation, keep the bowels quiet and suppress pain by the moderate use of opium after it. Toxæmia will not be likely to occur if the cavity of the uterus, vagina, and sac of the tumor be kept clear of blood, or the debris and sloughs of the injured structures, by the free use of tepid water, and, if necessary, solutions of antiseptics.

When the tumor is high up, it may be impossible to reach it so as to attack it successfully; yet in many instances we may do much by pressing the tumor down from above. The undeveloped state of the cervix and closed condition of the mouth of the uterus may often be remedied in a short time by the admirable means we now possess for dilating them; but I believe the bruised and excited state of the tissues thus dilated is not as favorable for speedy recovery from damage as the condition left after simple incision, and should rather favor free division of the parts at the *time* of the operation.

It will be seen that much of the incision made in my case was outside the cavity of the cervix, and that the os was not dilated, except by dragging the tumor through it. The plan practised by Dr. Scott, in a case recently reported by him in the *California Medical Gazette*, of dividing the tumor when too

large to be delivered otherwise, with the *ecrasseur* or scissors, until small enough to pass easily, is to be commended as a measure that will enable us to avoid the damage that might result from too great distention or pressure in forcing it through the external parts, and indispensable when too large to be delivered otherwise.

The only symptom that I think justifies an effort for the removal of intra-mural fibroids, where the operation is likely to be successful, is an exhausting or dangerous drain of blood; and even then the milder, though somewhat uncertain, measure recommended by Mr. Brown, of London, of incising the cervix, ought to be tried first, with the hope that nothing further will be necessary. Although these tumors of the uterus are very common, they comparatively seldom grow large enough to prove fatal by their size. Their presence alone, for the most part, is merely an inconvenience; but hemorrhage, when excessive, does great damage to the system—often directly, and oftener indirectly, bring about fatal results. We should not, therefore, operate because our patient has a tumor, but because the tumor is attended with damaging or dangerous hemorrhage.

ARTICLE II.

SODÆ SULPHIS IN THE TREATMENT OF INTERMITTENT FEVER.

By A. C. SIMONTON, Mitchellville, Iowa, December 3, 1868.

In a communication to the July number of the EXAMINER, I gave the results of a short experience in the treatment of *chronic ague* with sulphite of soda; and, in the closing remarks, made a statement concerning its efficacy in the acute form of the disease. But since that time I have pushed these experiments still farther, and am now better prepared to give an opinion concerning the value of the remedy in this latter form of the disease.

I have not only made use of it, as stated in the former arti-

cle, in connection with the ordinary antiperiodics, to render the cure more certain and permanent, but have thrown aside all other remedies in a great majority of cases treated during the autumn months; and I must say, the results have entirely surpassed my expectation.

My field for observation has been quite extensive, and the experiments have been confined to no small number of patients; therefore, I feel justified in laying the results before the profession.

Intermittent fever is a disease so peculiar in itself, that there is scarcely any possibility of being deceived concerning the value of a remedy in its treatment.

It does not belong to that class of, so-called, self-limited diseases; but, on the contrary, we are all aware of its tendency to grow from bad to worse, and continue indefinitely, especially if the patient continues to be exposed in a miasmatic district.

This being the fact, we are justifiable in classing any remedy as among the list of curative agents, which, when administered alone, cuts short the disease and restores patients to health, while yet exposed to those influences which naturally tend to produce and prolong the malady; and especially are we safe in coming to a conclusion of this kind, when the remedy has been tested in a great number of cases.

That the sulphite of soda is a remedy of this class, can no longer be doubted; and that it does the work as efficiently, and about as speedily, as the sulphate of quinia, is no longer to be denied.

The first case in which I ventured to administer the drug, alone, occurred August 13, 1868, when I was called to see a patient who had just emerged from a paroxysm of intermittent, and who was living in a strongly malarious section of the country. I determined in this case to try the efficacy of the sulphite, even at the risk of professional reputation. I therefore ordered for him 10-gr. doses of the sulphite of soda in solution, to be taken every two hours during the daytime, and every three or four hours during the night, right along, without regard to exacerbations or intermissions. The patient followed

my directions strictly, and, to my great satisfaction, there was no recurrence of the paroxysms whatever.

I had him continue the remedy in 10-gr. doses, three times a day, for about eight days longer, in order to render the cure more permanent. And I will state right here, that this patient has not had another paroxysm of ague during all the autumn months, and up to this time of writing, December 3d; and furthermore, that according to his history, he has been quite susceptible to the influence of malaria during former seasons.

Being encouraged by the results in the case just mentioned, I prescribed it in another case, August 17, 1868. This patient had been laboring under the quotidian form of the disease for about a week, and, dreading to take the old remedy, quinine, he had neglected calling aid sooner. Taking advantage of his disgust for quinine, I prescribed the sulphite in 10-gr. doses in solution as before, and to be given in like manner. The patient persisted in its use, and only succeeded in arresting the disease after the third paroxysm from commencement of medicine.

In this case, the prescription was made just prior to the occurrence of a paroxysm, and of course we would expect no amelioration of symptoms during this exacerbation; but the next paroxysm came on later, and was of shorter duration; the third was still lighter, which terminated the disease.

Now it may be alleged, that if the remedy acted as efficiently, it did not act as promptly, as quinine would have done in this case; but this allegation has but little weight, when we recollect that in cases which have continued for a number of days, quinine does not abridge the disease at once, but frequently requires as much time to produce a cure as the sulphite did in this instance. I will state here also, as in former case, that there has been no return of ague up to this time.

On August 18th, the next day after I had prescribed for the last-mentioned case, I was called to see a young lady for whom I had ordered quinine for a simple intermittent a few days before. She had taken two or three doses of the quinine, but having a natural disgust for the remedy, declared she would

not take any more. I therefore prepared for her the sulphite as in former cases, and she took it accordingly. The result was, that there was no recurrence of the paroxysms after commencing the remedy, save the one that was approaching at the time of prescribing. In this case, like the former, the remedy was continued in 10-gr. doses three times a day for several days, in order to completely eradicate the poison from the system. The patient remarked in a few days, that she felt better than she had all summer. There was no return of the disease during the autumn months.

I might go on and occupy several pages in reporting cases which I have treated with the sulphite, but it is hardly necessary; and there would be too much sameness about it, to be at all interesting, save as a mere matter of statistics. I have reported the three cases above as illustrative of my earliest experience with the remedy, alone, in the treatment of intermittents; and they will serve, also, to illustrate what may be expected from the remedy by those who have not ventured yet to give it a trial, and may wish to do so.

Since these cases were treated, it has been fully as common, during the autumn months, for me to prescribe the sulphite in simple intermittents, as it has quinine; and, in fact, I have almost felt as though I was doing my patients an injustice if I neglected to follow up the quinine treatment with sulphite.

During September and October, the cases treated by the sulphite, alone, were very numerous; and I feel confident in saying, that it has not failed in one single instance. And furthermore, I am fully persuaded that the remedy produces a more complete cure than is generally the case with quinine. This is certainly exemplified by the fact that relapses very seldom occur, at least in any short space of time, even though the patients are constantly exposed to the malarial influence.

As a matter of course, it is useless to assert that any remedy will render the system insusceptible to the poison, whatever its nature may be, which produces the disease under consideration; but when I assert that I have never observed but one case of relapse, out of the number treated by the remedy since

August last, I assert that which cannot be done concerning the number of cases treated by quinine, under the same circumstances. And in order that I might not be deceived on this point, I prescribed, on more than one occasion, quinine for one patient, and the sulphite for another, both being members of the same family, and, as a matter of course in such cases, surrounded by the same circumstances; and, as intimated above, relapses would occur in the cases treated with the quinine, when nothing of the kind would take place in those treated with the sulphite.

As regards the effects of the remedy on the various secretions, I have observed nothing of importance. The urine does not seem to be increased in quantity, although it is asserted by one or two observers, that some of its constituents are relatively altered in quantity. The effect on the bowels is very slight; the evacuations being rendered a little more free and copious, but, generally speaking, are not increased in frequency. The hyposulphite of soda, however, has a great tendency to cause looseness of the bowels, and for that reason I generally prefer the proto-salt. This fact, of the different effects of the two salts on the bowels, may be of some advantage occasionally, when this class of remedies is called into requisition.

It will be observed that I have said nothing about the remedy in the treatment of remittent fever; and the reason for this is, that my opportunities for observing its effects in this latter form of disease have been so limited, that I would not be justified in making any statement concerning this point; but I cannot see why the remedy would not be as admissible in remittent, as in the intermittent form of disease, since it is generally conceded by the profession that the two forms of disease are produced by identically the same poison.

Hoping to hear from other members of the profession on this important subject, I submit this meagre report for their consideration.

ARTICLE III.

MURIATE OF AMMONIA IN SYPHILIS.

BY THEODORE GRIFFIN, M.D., Chicago.

Being desirous to call attention to the efficacy of muriate of ammonia in secondary syphilis, I will narrate briefly the result of my experience with this article in two cases. I am satisfied that it is a valuable remedy, especially in the secondary form form of this disease. This conviction results from its successful employment where the usual remedies, combined and uncombined, failed.

Mr. ——— has for the past four years been the victim to secondary syphilis; the eruption being of the tubercular variety, and mostly confined to the lumbar region. Many of the sores being large and prominent, others excavated and ulcerating.

General health depraved. Sallow appearance of the skin. Pulse feeble, 90 per minute; indigestion. Mental depression, with conviction that he was diseased beyond the possibility of cure.

He was put upon the use of tonics and

℞. Iodide Potass., ---------- ℥ij.
Bi. Chlo. Hy.,---------- gr. 1.
Mucilage Acaciæ, ---------- ℥ij.

Ft. Sol. Liq. Take two teaspoonsful three times a day after meals.

This treatment, with warm baths and suitable hygienic measures, was strictly adhered to for two months, without any appreciable mitigation of the symptoms. Iodide of potass. and iodine, after Prof. Gunn's method (of Rush College), was tried; also iodide of fe., Stillingia, etc., almost *ad infinitum*, without avail.

Finally, the following combination was administered:—

℞. Iodide Potass., ---------- ℥ij.
Bi. Chlo. Hy.,---------- gr. 1.
Muriate Ammonia, ---------- ℥iij.
Mucilage Acaciæ, ---------- ℥ij.

Ft. Sd. Liq. Take teaspoonful three times a day, after meals.

Within one week after the commencement of this mixture improvement began, and at the end of six weeks the tubercles were cleared off, and the ulcerations healed. The patient now considers himself cured.

Case 2. Mr. ———, aged 22 years, unmarried, of intemperate habits. Contracted syphilis twelve years ago. One year following the disappearance of the primary symptoms, secondary symptoms appeared, which were subdued by his physician. For the past five years, until one year previous to his application to me, he had no manifestations of disease. During the past year he has been constantly under treatment for a papular eruption upon the breast, back, and legs. Hair-follicles diseased, with consequent loss of hair and eyebrows. Has been but little benefited by treatment. I put him at once upon the following:—

℞. Bi. Chlo. Hy., ---------- gr. ij.
Muriate Ammonia, ---------- ℥ss.
Mucilage Acaciæ, ---------- ℥ij.

Ft. Sol. Liq. Take teaspoonful three times a day, after meals.

General tonics were dispensed with. Improvement began at once, and the man now considers himself well.

I am convinced that the cure in these cases cannot be attributed to the iodide potass. and bi. chlo. hy. used in these cases, for they had been tried faithfully in a variety of ways, without avail. Neither to the *vis med. naturæ;* but to the muriate of ammonia.

Dr. Durkee, of Boston, in his book on Gonorrhœa and Syphilis, alludes to the use of this article in syphilis. In conversation with him two years ago, he said, "I believe muriate of ammonia to be a remedy of value, and would like to have it extensively tried." The Germans entertain a high opinion of its alterative and resolvent properties, and consider that its action on the system closely resembles that of mercury: increasing the secretions, but improving the tone of the nervous sys-

tem. Yet but little attention has been bestowed upon it as a remedy for syphilis, although its therapeutic properties indicate its use.

ARTICLE IV.

CASE OF SUDDEN DEATH.

BY A. M. GRAY, M.D., Chicago.

On Saturday, Nov. 21st, 1868, at noon, I was summoned, in great haste, to see a man who (the messenger said) had fallen down on the street near by, in a fit.

Accompanying the messenger, I found a Bohemian wood-sawyer, 38 years of age, lying in a store, writhing with pain. He could understand no English, and no interpreter was at hand, but by signs he gave me to understand that the difficulty was at the top of the sternum. He made no attempt at talking, nor did he even moan, but he was with great difficulty kept quiet. The extremities were *very* cold, although he was warmly clad. No pulse whatever could I discover. Countenance haggard and anxious; lips deeply congested; brow covered with cold, clammy sweat; inspiration difficult; expiration easy; by auscultation, little or no movement of the heart could be discovered. Diagnosis, "angina pectoris." I immediately administered a drachm of chloroform internally, with the effect of relieving the paroxysm for perhaps five minutes, when another paroxysm came on: he now indicated that the pain had shifted to the base of the sternum. In another moment he exhibited signs of great pain in the bladder, and at the occiput. By this time a hot paste of mustard and capsicum was prepared, and was applied *liberally* to the chest and stomach. Another drachm of chloroform was administered, followed by relief. He showed signs of sinking, and I administered quinine sulph., grs. x.; pulv. capsici, grs. v. But our efforts were of no avail. In twenty minutes from the time I was called he was dead. Consciousness was maintained to within five minutes of his death.

An autopsy was denied.

From the wife I learned that he had been in this country about a year, that he had never known a sick day, had never complained of any pain, except a little soreness in the chest for the past few weeks; that he was regular in his habits, temperate, appetite good. I should judge him to have been about five feet ten inches in height, weight about 175 lbs., though not fleshy; countenance slightly anæmic. From the symptoms and appearances of the patient, I am inclined to the opinion that fatty degeneration of the heart, or dilatation of its walls, existed.

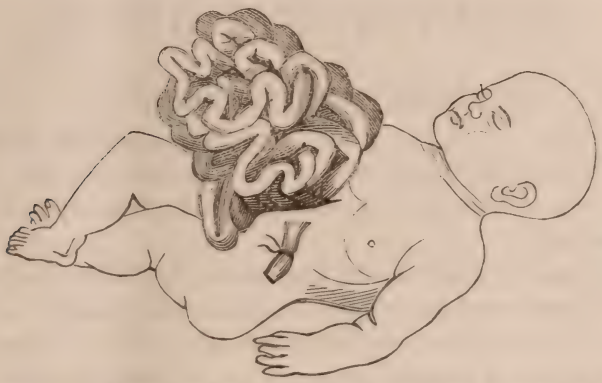
ARTICLE V.

ECTROPIUM INTESTINORUM.

By GEO. FREDIGKE, M.D., Chicago.

History.—The individual affected was a boy, born at 6.30 A. M., the 15th November, by Mrs. B., wife of Jacob B., and attended by Mrs. F., a midwife. The mother is 21 years old, healthy, and was delivered of a girl 16 months ago, so that this was her second child.

Description.—From an opening 2 inches in length at the umbilical region, ¼ inch to the right of the umbilicus, and parallel to the linea alba, bulged out the greater portion of the intestines. Their coats were hypertrophied, and the abdominal wall was to such an extent contracted as to allow only the admission of the small finger on both sides of the orifice. The rigidity of the abdominal wall did not allow of any stretching. It was an 8 months' child, passed its natural secretion, fæces, and urine. In the morning it vomited bile, and in the afternoon nursed at its mother's breast; its pulse was regular, as also its respiration. The portions out were made up by the duodenum, jejunum, and ileum of the small intestines, and the colon and a portion of the rectum of the large intestines. It died the next day, the 16th November, having lived exactly 21½ hours.



Treatment.—I was called to the aid of the child at 11½ A. M. on the day of its birth. From the time of its birth till then, 2 inches more escaped. By warm and emollient applications, I succeeded in replacing what had, since its birth, escaped (by crying and bearing down); but to crowd in more of the protruded parts was like stuffing a full bag. If the child was handled and the escaped intestines not disturbed, it was quiet; but if they were touched, it would cry. The specimen could not be obtained, nor was a *post mortem* allowed to be made.

Remarks.—Similar cases, although of rare occurrence, occasionally occur: a specimen of ectropium of the bladder can be seen in the museum of Chicago Medical College. Judging from the appearance of the fissure, and taking into account the early development of the intestines and abdominal walls, it is very probable that it was a natural defect. At the end of the second month of fœtal gestation, the intestines grow much faster than the abdominal walls; so much so, that they are incapable to hold the mass of the bowels, and they protrude, like a hernia. At this time, the growth of the abdominal walls must have been by some cause arrested in this case, and the above condition made permanent; for it was absolutely impossible to find space enough for an insignificant portion of the protruding intestinal mass. Congenital umbilical hernia occurs by an imperfectly-closed umbilicus; but this case was very much different, for the umbilicus was perfectly formed.

Proceedings of Societies.

CHICAGO MEDICAL SOCIETY.

NOVEMBER 20, 1868.

The Society was called to order by the President, Dr. Marguerat, after which the Secretary read the proceedings of the last meeting.

Under call for Pathological Specimens, Dr. Fisher read a report, and presented for the examination of the Society the kidneys of a patient who died November 18. The case presented the symptoms of general dropsy, urine albuminous; and tapping was resorted to several times. After tapping, the amount of urine passed was very much increased. In July last, the patient had an attack of pleurisy, the bloating continuing. Liver was enlarged. Mitral regurtitation. A *post mortem* was held by Drs. Fisher, Bogue, and others. Found about a gallon of fluid in the abdominal cavity, two quarts in thorax, and about four ounces in the pericardium. The heart was hypertrophied. Liver enlarged, and uneven. The kidneys presented were fibrinous, atrophied, and contained an earthy concretion in the centre.

Dr. Fisher asked if any member had noticed, after tapping, this extensive passage of urine (two gallons in 24 hours)?

Dr. Reid said he had never seen such a case, but had noticed a great increase in the amount of urine voided after labor, and probably due to same cause; but, instead of the fluid, the fœtus compressing and congesting the kidneys.

Dr. Davis asked if this condition of the kidneys and liver were not due to rheumatism or cardiac disease? The Doctor was inclined to think it due to the latter. Remarked that he could recall several cases of chronic rheumatism which have existed ten or twelve years without showing albumen in the urine. Thinks, had the urine been examined before the cardiac difficulty, no albumen would have been found. Thinks the excessive urination after tapping was not of frequent occurrence. Cited case corner Burnside and 18th Streets.

Dr. Paoli presented a plate showing a case of Elephantiasis Græcorum, from a man whom he had seen in New York City. The patient came from Europe, after suffering three years, hearing the climate would probably prove beneficial. Also presented a patient to the Society whose arm and face showed signs of the same disease, and whose sister had elephantiasis.

Dr. Reid said he never should have known that the patient presented was suffering from elephantiasis, had he not been so informed by Dr. Paoli. That it was a new form to him, and that he supposed there was great enlargement, and that it was incurable.

Dr. Fredigke presented drawings representing a case of "Ectropium of the Intestines." The child was born November 15th, in the 8th month of gestation. The umbilicus was perfectly formed, and the child lived 21½ hours.

Dr. Paoli remarked, that he presented a similar case some years ago, the child being about 7 months old, and being born with but one arm.

The Society proceeded to discuss the subject as to the "Prevalence of Typhus and other Fevers," which was chosen at a previous meeting.

Dr. Davis opened the discussion, by relating somewhat in detail the characteristic symptoms of several cases of continued fever, as samples of a considerable number of cases that had come under his observation during the last two months. They differed from ordinary cases of typhoid fever, in attacking many children; in attacking several successively in the same family, and presenting but little tendency to diarrhœa. They also occurred mostly among the poor, in bad sanitary localities.

Dr. Clarke remarked, that he did not think we were having typhus fever; at least, nearly all that came under his observation were intermittent and remittent, and an occasional case of typho-malarial fever. Cited case of a fellow-practitioner, who saw some cases which had a queer look. Was called in case of a child six years old. Found it to be a case of purely intermittent. Gave quinine, and child recovered in about eight days.

Dr. Paoli remarked, that he had not seen a case of typhus fever in Chicago for eight years. Thinks cases reported by Dr. Davis are similar to typhus, but wishes to know whether they are typhus or typhoid. Said we had cases of typhoid very similar to typhus, attended with great emaciation, with the eruption more on the extremities than abdomen.

Dr. Foster asked on what day the eruption occurred in these fevers, and their difference?

Dr. Marguerat reported a case where there was no diarrhœa, the fever continuing three weeks; the patient dying the latter part of the fourth week, from brain symptoms. Remarked, that Dr. Dyas reported two cases of typhus fever to the Board of Health some three months ago.

Dr. Davis said, that the time of the appearance of the eruption was variable, and in cases of some children there was none. Cited case in hospital, who was admitted fourth or fifth day after onset. Noticed the eruption the next day after admission, in form of a fine red papule. Not ecchymosis, but a simple exanthematous rash, appearing in all cases, from the sixth to the tenth day.

Does not find the eruption in typhus in all cases. Considers the difference between the typhus and typhoid to consist in the absence of tympanitis and loose bowels which exist in the latter. Cited case in Mercy Hospital, upon which he held a clinic October 7, which he thought to be typhus instead of typhoid. Also reported a case of typhus continuing nine or ten days, resulting in death. Remarked, that it was not his object to maintain that we had typhus in the city, but to elicit the experience of the Society. Asked the Society if any one had seen cases of cerebro-spinal meningitis or spotted fever? Reported several deaths where patients were attacked suddenly. No convulsions, no opisthotonos, but constant delirium.

Dr. Marguerat said he was called where three children died suddenly, but he believed the disease to be scarlet fever.

Dr. Wickersham remarked, that he had seen a great deal of scarlet fever of late, and he had no doubt but what the cases dying off suddenly were those of scarlet fever.

Dr. Davis said, that in those cases occurring on Clinton Street, a practitioner on the West Side said it was scarlet fever.

The subject chosen for next discussion of Society was, "Would "it be conducive to Morality to limit the Diseases arising from "Prostitution?"

Drs. Bridge and Gray were appointed to open discussion.

On motion, Society adjourned.

NOVEMBER 27, 1868.

The Regular Meeting of the Society, in the absence of the President, was called to order by the Vice-President, Dr. Bogue.

The Secretary then read the proceedings of the last meeting, which were approved, and ordered to be placed on file.

Under the call for Pathological Specimens, Dr. Bogue presented for the inspection of the Society a part of the lower jaw of a man some 20 or 25 years of age, which was the seat of a medullary or internal carcinomatous tumor, removed that day by Dr. Powell, at the County Hospital.

The tumor first appeared some 20 months ago, and, as a rule, the patient has suffered but little pain. There were no glandular enlargements about the mouth; and, taking these matters into consideration, Dr. Bogue said that he did not think the growth malignant.

The operation consisted in removing a tooth at the point where the division was to be made; then making an incision along the inferior angle of the jaw; after which, the chain-saw was applied, and division made. An instrument was then used to divest the portion of the jaw of the periosteum, when the jaw was pulled out. The facial artery was the only one ligated in the operation. Dr. Powell thinks that where the portion of the jaw is pulled out instead of being dissected out, there is decidedly less hemorrhage.

Dr. Ross presented the heart of a woman 44 years of age, who died in County Hospital, showing a large aneurism of the aorta. The patient has been under treatment altogether about

18 months, and for the past two months, and up to time of death, in the County Hospital. The Doctor states, that when he was called to see the patient, she was in a fainting-fit, which was followed by difficulty in breathing. The pulse was small, frequent, and patient complained of weight in chest. If in the semi-recumbent position on left side, she felt quite comfortable; but upon turning on the right side, she was troubled with great dyspnœa.

On next morning, patient was better. Pulse regular, although at times there was difficulty in swallowing. Respiration accompanied by a wheezing, laryngeal sound. Valvular sounds of heart normal. Tongue moist and clean.

About October 1, commenced giving iodide and bromide of potassa, chloric ether, tinct. verat. viride, and tinct. iron; which treatment was continued about four weeks. Voice broken, as though the vocal cords were relaxed.

October 28, Dr. Davis was called in counsel. From this time patient kept her bed. There was detected a wavy impulse one inch to right of sternum, between the first and second ribs. Heart-sounds continued natural.

November 21, patient died, with symptoms of great dyspnœa.

Post Mortem.—Found left lung somewhat collapsed, and both emphysematous.

Dr. Ross remarked, that he had never seen a case where so large an aneurism existed, where the subclavian and carotid arteries were not blocked up by coagula.

The leading symptoms throughout the entire course of the disease were dyspnœa and a wheezing cough.

Dr. Ross said he could not account for patient's not being able to lie on right side. Respiratory murmur good all over chest. No dulness on percussion. Remarked, that deceased has a sister living on the North Side, who probably has fatty degeneration of the heart.

Dr. Gray reported a case of Angina Pectoris, which proved fatal in twenty minutes.

Dr. Clarke reported a case of Ovariotomy—Mrs. H., of Fort Atkinson, Ohio. The tumor was removed August 6, 1867.

The patient made a rapid recovery, and is now in the enjoyment of good health. Drs. Davis and Bickney, of Fort Atkinson, under whose care the patient had been, assisted in the operation.

Drs. Paoli and Powell made some remarks on the case, the latter recommending silver sutures in ligating the pedicle, as he had seen one case where the discharge was kept up for a long time where silk was used, and finally resulting in a fistula.

Dr. Fitch said he had under treatment a case of Fibrous Tumor, which has been growing seven years. Patient suffers no inconvenience, except from weight of tumor. She has occasional attacks of cystitis, urethritis, or vaginitis. Had two attacks during past 18 months. Does not interfere with general health. Three years ago, patient was pale and anæmic. Gave syr. ferri iodidi, which has been continued most of the time since. At one time she omitted it for about three months, when she began to grow anæmic again.

Society adjourned.

Selections.

THE HYGIENE OF INFANCY:

ABSTRACTS OF LECTURES

DELIVERED AT THE BELLEVUE HOSPITAL MEDICAL COLLEGE,

By GEORGE T. ELLIOT, Jr., M.D.,
Prof. of Obstetrics and the Diseases of Women and Children.

Gentlemen:—The subject to which I shall call your attention, in the four lectures of this preliminary course, is of the first importance to the rational study and treatment of the diseases of infancy; for many of these owe their existence to infraction of the laws of hygiene.

To diminish the terrible—though to a certain extent inevitable—mortality of infancy, to avert evil influences, to develop the good, to diminish the necessity for drugs, and so to carry these helpless little ones through the perils of infancy that they may reach the less dangerous years of childhood with well-de-

veloped constitutions, are tasks which demand both the knowledge and the application of the best hygienic laws.

While it will be impossible for me to attempt to exhaust the subject, I shall avoid at least useless details, and endeavor to fix your minds only on what may be direct and practical; nor shall I hesitate to set the hygienic indications in a clearer light by illustrating pathological conditions which may follow their neglect, as well as those which may forbid success.

If time would permit our thorough study of the subject, we should commence with those hereditary predispositions and influences which affect for good or ill the fœtus and the man, and those conditions of the mother's health and hygiene which are liable to affect gestation; but, passing over these interesting questions, we come at once to a broad division of the subject.

I. DUTIES OF THE PHYSICIAN TO THE NEW-BORN CHILD.

Establishment of Respiration.—Hitherto, in the womb, it has drawn its supply of oxygen from the mother, through the placental circulation; now it is obliged to obtain this vitalizing agent from the outer world, through organs whose functions have rested in abeyance. Hence our first duty is to see that the function of respiration is fully established. Fully, I say, because it not unfrequently happens that unless this be thoroughly done, portions of the lungs are left unexpanded, collapsed as they were in the womb before respiration was necessary; and thus, sufficient machinery not being set in action, after a while oxygenation is not thoroughly accomplished; the respiration labors; the vital power fails; more lung tissue ceases to work, perhaps collapses; the surface becomes blue, the nerve tissue poisoned by black blood, the senses benumbed, the vital warmth displayed by the advancing coldness of death. This unexpanded condition of the air-cells, which may obtain from the failure to establish respiration, and to which the lungs of infants are liable to revert in conditions of debility and catarrh, is known under the name of atelectasis. Prevent these dangers by insuring such full and continued respirations as may make you morally certain that all the cells have been distended. Hearty and continued cries from the child generally attest this result.

Now children are often born in natural labor, and in labors attended by special dangers, in a condition of apparent death. A broad distinction is drawn by authors between those apparently dead or apparently dying, with a congested or a pallid surface of the body. Treatment has been formulated in accordance with these obvious signs. I do not dwell upon them. No

greater congestion of the internal organs has ever come under my observation, in the autopsy of these children, than in cases where the surface has been pallid. Congestion of the skin does not kill; it is congestion and extravasation within that we dread. Skin congestion accompanies internal congestions, but these latter may exist without the former. Signs of strength and vigor may permit treatment contraindicated in premature and puny children. Do not believe that the liver and brain must be pallid, because the skin is white.

Do not assume that, because a child is born and shortly dies with a thoroughly congested and blue surface, it died from "the blue disease," or cyanosis. Cyanosis to constitute a disease, must be recurrent; or if believed to have caused the death under the circumstances we are considering, something more than a patent foramen ovale must be shown by the autopsy. The foramen ovale would be patulous, as a matter of course. How could it have closed in so short a time, even if its persistent patency were assigned as the cause of cyanosis?

When, therefore, children are born and do not respire, is blood to be let? Is the indication to be based on the color of the skin? What method is to be preferred? Shall we allow blood to flow from the cord, or take it by leeches? I mention the latter advice only for condemnation. If you allow the blood to flow from the cord, hold it well, as you would a cut axillary artery, so that you can control it at once. A teaspoonful is a limit beyond which I would very rarely go. But I very seldom allow any blood to flow, and still more rarely until I have rapidly tried the measures to which I now invite your attention. Establish respiration thoroughly, and the sluggish circulation becomes active, the ruddy glow of health colors the skin.

Free the mouth and nose from mucous and vaginal discharges. Note that there be no malformation. It has been noticed that a simple band of skin over both nostrils, easily divided with a bistoury, has powerfully affected the respiration of a new-born child. Women relatively breathe more with the thorax, men with the abdomen; perhaps the new-born child, destined in lactation to rely so much on the nostrils, may physiologically need them more than we. Free the nostrils and the mouth thoroughly, both in order to admit air, and because in the first inspirations these materials may be drawn into the air-passages and occlude the bronchi. Such conditions may have obtained in utero from premature inspiratory efforts. Liquor amnii and meconium may be demonstrated in the air-passages by the microscope. The child yet contained within the unbroken am-

niotic pouch, compelled to respire prematurely by reflex irritations, or by that respiratory need awakened by interference with the placental circulation, may thus be drowned in the womb of its mother, and the cause of death demonstrated at the autopsy. Try to prevent this accident to the respiratory passages when the child is born, and in your hands.

When the child is separated from the placenta, if the stimulus of the respiratory need, and the transition to the cool air of the room are not sufficient, spank it over the buttocks with the tips of your fingers, and rapidly use Marshall Hall's or Sylvester's method for the resuscitation of those who have been drawn from the water. If not promptly successful, plunge the body of the child in warm water (which should be ready in advance), and then into cold water. You thus keep up the warmth, draw blood to the surface, and increase the shock of the cold application. Spur the diaphragm and intercostals by brisk sprinkling of water; a lump of ice or a column of water to the epigastrium; then back again to the warm water, so as to diminish internal congestion and the benumbing influence of continued cold. From the warm water place the child on a blanket, on the floor or bed, and thoroughly try Hall's or Sylvester's method. I prefer Hall's but use both, and have seen children saved exclusively by each. It is not necessary to draw the tongue forward. It is important to keep the chin in a line with the sternum, and to keep the trachea somewhat prominent. Remember to prevent the child from getting too cold. Hot and cold water again. Slap, sprinkle, blow on the surface of the body, aid the slow and struggling expiration by gentle pressure on the chest. Have a battery on hand. Place the poles on the sides of the neck (third and fourth cervical), and over the diaphragm. The theory is to stimulate the phrenic nerve. The battery, however, under my observation, has proved less valuable than the other methods detailed, and I therefore only indicate the most important application. During this time abstraction of blood will have been considered. Do not let the water be too hot; you may scald the insensible child. Too hot water has been asserted to have caused trismus. Shall you inflate the lungs with your own breath? If so, be sure that the air enters the larynx. With skilful manipulation a catheter makes this certain. Generally the stomach is blown up, unless precautions be taken. Do not blow into the lungs so as to produce emphysema. I have seen emphysema, however, in new-born children, whose lungs had not been thus inflated. If you inflate the lungs, do not blow when the child is making a respiratory effort. In one

word, my personal experience makes me rank this method of inflation as secondary to alternations of heat and cold, stimuli, and the methods of Hall and Sylvester.

Persist in these trials as long as the heart can be felt or heard, and a little longer than it can be heard. The quickest way to feel the heart is to put the pulp of your finger under the ribs and lift up the diaphragm. Pulsation can be felt thus when it cannot be touched through the thorax. Persist a while after the heart has apparently ceased to beat. A life for which you are responsible hangs upon the effort. There is nothing more surprising than the tenacity with which some infants cling to life, except the facility with which others lose it.

But, gentlemen, all your endeavors will often fail. For your satisfaction, and for the satisfaction of the family, obtain an autopsy. The pathology of fœtal life and of the still-born yields to none other in interest or value. It is a microcosm but too little explored. It is melancholy to see the neglect of the subject in practice and in the records of great hospitals. A still-born child one would suppose to be a child still-born from some unexplained and sufficient general cause. Start clear from such apathy, such delusions. The autopsy may show that you struggled against hope, that the establishment of respiration was hopeless, or its continuance impossible. Gather this consolation when you can. Search at least for truth. The respiratory passages may be proved by the autopsy to be absent in whole or in part. Trachea or bronchi may be replaced by impervious cords. Cysts, peritoneal effusions, pleuritic effusions, may have developed themselves in fœtal life, may not have killed the child, but may prevent air from reaching the lungs, the diaphragm from descending, the lungs from expanding. The pulmonary artery may be absent or barely pervious. The heart may be in front of the neck, within the abdomen, outside of the thorax; it may be unfitted for the strain of the altered circulation from malformation and from intra-uterine disease. The diaphragm may be open, and the intestines have crowded into the thorax and stopped the lungs from expanding. Extravasations on the brain and into its tissue may have caused the death. These extravasations may have occurred before the labor commenced. I have said enough to show that you may have the consolation of knowing and proving that your responsibility has been discharged, that the cause of death bore no relation to your management of the labor, or to your choice and use of means to establish respiration, when respiration was impossible.

Ligation of the Cord.—In ligating the cord, always examine the umbilicus thoroughly for hernial protrusion. Cut far enough away from the body to leave space for a second ligature, in case it becomes necessary to apply it after the occurrence of hemorrhage. The gelatinous material composing the envelope of the cord is very apt to make the first ligature slip.

Knots in the cord may be found, but they rarely produce death. Their occurrence has been explained by supposing that the head of the child passed down through a loop in the cord. The cord is often twisted about the neck; and it is sometimes necessary to use forceps to effect delivery in these cases; I have never, however, had to cut the cord before delivery. A cord shortened from this or other reasons may produce delayed labor; and, if the forceps be used, the resistance due to the cord may be felt upon attempting traction in increasing ratio to the advance. It is difficult or impossible to diagnosticate these cases, until the head is well down in the vagina, or until the head is delivered.

Warmth and Ventilation.—After having secured the establishment of respiration, it is of the first importance to see that the infant be kept warm. Of all the young mammals, the human probably requires the most care in this respect. Yet exceptional instances may be cited indicative of the opposite condition. Children exposed in the streets and taken to foundling hospitals often die from cold. The competent motherly nurse takes the greatest care of the warmth of the child. Sleeping with its mother is the natural means for warming the child, a species of incubation, but is attended with liability to accidents; the child may be smothered beneath the bedclothes, by the mother or nurse, either accidentally or intentionally, overlaying it. The mother or nurse is also very apt to nurse the child too often at night, and thus institute a bad habit both for herself and for the infant. Moreover, the air of the mother's bed is more or less impure from the lochia.

I now wish to advise you particularly to see that there is constantly in the nursery a sufficient supply of fresh air. No observations illustrate my remark better than those made in the Dublin Lying-in Asylum, where for twenty-five years the mortality was 1 in 6. On the introduction of proper ventilation, the mortality fell to 1 in $19\frac{1}{3}$, and subsequently to 1 in $58\frac{1}{2}$. A thousand cubic feet of space are ordinarily regarded as desirable for an adult; a young child requires no less than an adult. Apart from the respiratory troubles overcrowding produces, it increases the liability to epidemics, to ophthalmia, and depraved nutrition.

Residence.—Very frequently it will be found that a change of residence will prove of decided benefit to the infant, especially when some depressing or contagious atmospheric influence exists in the neighborhood where the child is residing. A change from one part of the city to another may be sufficient. Often, however, the sea-side or the mountain may offer special claims, especially for escape from heat.

Urination.—It is of great consequence to see that the infant passes its water. Urine is secreted and passed in utero, and may be passed during and just after birth. In some children the urine has been retained, and the distention of the bladder has been so great as to prove a cause of delayed labor. Cystic kidneys have done the same. In one case the bladder was found capable of containing two quarts of urine; in other cases it has ruptured before birth. After birth, almost before the child draws its first breath, it often passes its urine. Should it not do so within the first twenty-four hours, we should learn why not. It may happen that the bladder was emptied immediately after or during labor. It may be that so little milk has been taken that the kidneys have not been called upon to act freely. Babies urinate in direct proportion to the amount of milk or liquid nourishment they receive, in a ratio five or six times as great in proportion to bulk as in the case of the adult. Hence, whenever we learn that the infant is passing but a scanty amount of urine daily, it is always safe to ask whether it is receiving milk enough from its mother or the wet-nurse.

Obstruction to the passage of urine may occur from deformity, or the partial or total absence of the organs necessary to the function of urination; such as partial or complete absence of the urethra, absence of the bladder, with compensatory openings, or of the kidneys, or impervious ureters. Perhaps the bladder may be very capacious or atonic. A cause of obstruction to the flow of urine shortly after birth, in boys, is dependent upon simple agglutination of the urethral walls. (I have more frequently found urine in the bladders of still-born boys than in those of still-born girls. It is natural that it should be so.) This condition is easily remedied by the introduction of a silver probe, curved into the form of a catheter; the urine generally trickles out along its sides, and then flows freely. The reflex irritation thus produced is often all that is necessary. Whenever you are told that the water does not pass by the natural outlet, always examine thoroughly for some abnormal opening through which it may be passing unperceived, especially for vesico-vaginal fistula, cloacæ, and hermaphroditism. Some-

times, but not very frequently, a condition occurs, known as hydronephrosis, in which the bladder and ureters may be immensely dilated, so as to resemble the fœtal intestines, and the kidneys affected by the pressure of the retained urine. In one case under my observation, in which this condition was found, my explanation was that, owing to the shallowness of the pelvis and the obliquity of its brim, the bladder had fallen forwards, after dilation had commenced, thus producing an angular flexure of the urethra or neck of the bladder, preventing the discharge of the urine, for the urethra was normal in size; accumulation had then occurred, and, by the "back-water" action, produced the changes in the urinary tract, distending the ureters, calices, pelves, and causing absorption of the cortical structure. Retention of urine may also occur from pressure upon the ureter, as by the passage across it of a supernumerary branch of the renal artery. I have never seen a case in which puncture of the bladder was demanded, in the new-born child, for retention; but, if necessary, I should prefer the supra-pubic method.

Cleanliness.—The education of the infant should begin with the first days of its extra-uterine life, and a point of no little importance is to see that it does not lie in wet or soiled diapers. Let these be removed immediately after it has soiled them, and soon it will learn to indicate by its cries its disapproval of damp diapers. See that the napkins are not dried in crowded rooms before the registers. Moreover, if a child is allowed to lie almost constantly in its own excretions collected in the napkins, erythematous eruptions, or even ulcerations, will be formed upon its nates, and these may sometimes have a very suspicious appearance. Now, gentlemen, do not be in a hurry to diagnosticate all ulcerations you find upon the buttocks of an infant as necessarily syphilitic in character. Appearances should not always be interpreted against the infant. Uncleanliness, and neglect to apply other clean, dry napkins as soon as the first are soiled, is a very common source of sores about the infant's buttocks, simulating syphilitic cachectic ulcers. By removing the cause of the trouble, applying a mild lead wash or other lotion, and seeing that the child is well nourished, we can generally heal up these ulcerations without difficulty, and dissipate the mistaken diagnosis. In diarrhœa, redouble precautions: cleanliness, lead water, calamine powder, disinfectants.

Passage of Fæces.—The liquor amnii does not, as a rule, contain meconium. When the finger, introduced into the vagina, encounters this, its presence is commonly supposed to indicate the death of the fœtus, or a breech presentation. But

even when there is no breech presentation, we should not lay too much stress upon this symptom when making our prognosis, except in so far as it is indicative of great danger to the fœtus. There are very few positive signs of death of the fœtus. Inability to recognize the fœtal heart-beat is not sufficient evidence that the child is dead. There are few very strong evidences of its death. No pulsation distinguishable, after a long lapse of time, in the cord; second, the perception by the finger that the parietal and occipital bones collapse and move about on pressure, while the skin peels off on friction. If you do not recognize by the touch that the child is putrid, try to deliver promptly, and revive it if possible.

Always inquire, the first day after birth, if the infant has had a passage from its bowels. If it has not, examine it carefully. An examination of the external orifice, alone, is not sufficient. Introduce a probe into the rectum, and see whether it does not end in a *cul-de-sac*. It may be that parts of the intestines, which you cannot reach, consist only of fibrous bands, and in these various contingencies the question will arise as to the formation of an artificial anus.

Obstruction of the intestinal canal may occur from infarction by an accumulation of epithelial scales.

In children born without an anus, there may be a connection of the rectum with the vagina or the bladder. In the former case, we should make an incision in the median line, establish an anus in its usual situation, and, later in life, heal the recto-vaginal fistula by the usual procedures. In the latter wait developments, or, if possible, follow the same course.

Simple closure of the raphe or lower part of the rectum is the easiest malformation to detect and treat. When the question arises as to the advisability of groping one's way with bistoury, scissors, and fingers, where the rectum ought to have been, and then of plunging a trocar into something above that we believe to be intestine, or when we select the alternative of an artificial anus, our duty is clear, to represent fully the uncertainties and dangers to the family, with the limited chance of success in the last contingency. If the parents refuse, a painful and unsatisfactory operation need not be performed. If they assent, or saddle you with the whole responsibility of the decision, you must even make the artificial anus, for it has saved life in the history of the operation, though you will probably fail. The alacrity to be felt in the operation is in direct ratio to the expectation of speedily reaching the intestine from below. Before performing it, wait for the intestine to be dis-

tended, if you cannot feel it, but not too long.—*N. Y. Medical Record.*

UTILIZATION AND CONTAGION.

Dr. Wm. T. Thomas, of New York, has furnished a very accurate and thoughtful article in the Transactions of the New York Medical Society.

In 1863 there were 15,369 tenement houses in New York, with a population of about 500,000. There are only two diseases in which the mortality in New York and London are nearly equal, *viz.*, Small-Pox and Remittent Fever. Of the former disease, 1 in 1384 of the population die in London; and 1 in 1303 in New York. Of remittent fever, 1 in 32,954 of the population in London, and 1 in 34,615 in New York.

New York has a less mortality than London, in measles, scarlet fever, quinsy, whooping-cough, erysipelas, carbuncle, influenza, rheumatism, zymotic diseases generally. Thus, 1 in 1772 of population die of measles in London, and only 1 in 4186 in New York. As many as 1 in 585 of population die of scarlet fever in London, and only 1 in 4186 in New York. 1 in 35,802 of quinsy, to 1 in 81,818; 1 in 1333 of whooping-cough, to 1 in 7887; 1 in 6561 of erysipelas, to 1 in 7258; 1 in 51,786 of carbuncle, to 1 in 250,000; 1 in 70,773 of influenza, to 1 in 81,818; 1 in 6666 of rheumatics, to 1 in 18,544.

New York has a greater mortality than London in diphtheria, croup, typhus and typhoid and puerperal fever, dysentery, diarrhœa, cholera, and ague. Thus, only 1 in 3755 of population die of diphtheria in London, while as many as 1 in 918 die in New York; 1 in 3111 of croup, to 1 in 901; 1 in 1032 of typhus and typhoid fevers, to 1 in 854; 1 in 13,181 of puerperal fever, to one in 10,742; only 1 in 26,851 of dysentery in London, to 1 in 3146 of population in New York; 1 in 1212 of diarrhœa, to 1 in 380; 1 in 18,230 of cholera, and 1 in 7429; 1 in 152,681 of ague, to 1 in 56,259. Of all other zymotic diseases, 1 in 116,000 of population die in London, 1 in 150,000 in New York.

In the tenement houses of New York every 6-story building averages 24 families, of five or more persons each. Each person has a little over 15 square feet of ground area, and 480 cubic feet of air space in the whole house. In the apartments the allowance of air space is only 317 cubic feet, and in the dormitories but 89 feet to each person. A full 1000 cubic feet of air space are required.

The air (if pure) which an adult healthy man breathes *in* contains only 0.4 per 1000 volumes of *carbonic acid;* while that he breathes *out* contains 40 volumes per 1000, in addition to *fetid organic matter* and water-vapor to saturation. It requires at least 2000 cubic feet per hour, of pure air, to keep the exposed carbonic acid at 0.5 or 0.6 per 1000 volumes, and to remove entirely the fetid smell of organic matter exposed, to say nothing of the filth and smell of persons, clothes, cooking and food-utensils, remains of food and offal generally.

The carbonic acid of respiration is equally diffused through the air of a room, and is very rapidly got rid of by opening windows. But neither the fetid or organic matter, nor the watery vapor, diffuse rapidly nor thoroughly.

At least 30 grains, and perhaps 240 grains, of organic matter are given off from the lungs and skin, and from 25 to 40 ounces of water in 24 hours. The organic matter is made up of small particles of epithelium and fatty matter detached from the skin, and partly of an organic vapor given off from the lungs and mouth. It has a fetid smell, and is retained in a room for a long time, sometimes for 4 hours, even when there is free ventilation, showing that it is oxidized very slowly. It is absorbed most by wool, feathers, damphrally and moist paper; and least by straw and horse-hair. It is molecular, and floats in clouds in the air, when the odor of it is not always equally diffused through a room. A large quantity of carbonic acid, derived from respiration, always indicates a large quantity of organic matter, the smell of which generally becomes perceptible when the carbonic acid reaches 0.7 per 1000 volumes; and is very strong when it amounts to 1 per 1000.

Besides the gaseous products strictly derived from the lungs, the air of most dwelling-houses, when examined by the æroscope, is found to contain many *epithelium cells;* most of which are evidently derived from the skin. They are rubbed off and then float through the air, and often become the carriers of the contagion of scarlet fever and measles, as they are saturated with poison when these diseases prevail. The epithelium of the mouth, throat, and nostrils, are foliated, and in diphtheria, typhus and typhoid fevers, and thus load the air with poisonous particles.

In all tainted atmospheres of this kind, it seems that the germs of infusoria abound to a much greater extent than in pure air. The possibility of a direct transference from body to body of cells (or epithelium) undergoing special changes, is thus placed beyond doubt, and the doctrine of contagion receives an

additional elucidation. It remains to be seen whether pus or epithelium cells, becoming dried in the atmosphere, can again, on exposure, become revivified. Some protophytes, like the prolococcus pluvialis, may be dried, and yet retain their vitality for years, and may be flown about in atmospheric currents.

The effect of the fetid air containing organic matter, except of carbonic acid and water, is very marked on many people, causing heaviness, headache, inertness, nausea, or even decided symptoms, such as heat of skin, quick pulse, furred tongue, loss of appetite, and thirst, lasting for 24 or over 48 hours.

Usually, the persons who are compelled to breathe such an atmosphere are, at the same time, sedentary, and remain in a constrained position for many hours, are also underfed, and perhaps intemperate. They soon become pale, lose their appetite, decline in muscular strength and spirits. They are very apt to become scrofulous and consumptive. Baudelocque long ago asserted that impure air is the great cause of scrofula, and that hereditary predisposition, syphilis, uncleanliness, want of clothing, bad food, and humid air, are, by themselves, non-effective. In the Dublin House of Industry, where consumption was so common as to be thought contagious, there were in one ward, 60 feet long and 18 broad, 38 beds, each containing four children; the atmosphere was so bad that, in the morning, the air of the ward was unendurable. The food was excellent, and the only causes for the excessive prevalency of consumption were foul air and want of exercise. In the prison of Leopoldstadt of Vienna, which was very badly ventilated, 378 prisoners died out of 4280, or one in twelve; and of these, no less than 220, or nearly two-thirds, died of consumption. There were no less than 42 cases of acute military tuberculosis. In the well-ventilated houses of correction, in Vienna, only 43 died out of 3037, or 1 in 71; and of these only 24, or 1 in 126, died of phthisis. (But consumption is only a personal and family affection; it is not handed from mouth to mouth, or from person to person, and thus made to invade the whole community.) The most important class of diseases produced by impurities in the atmosphere are certainly caused by the presence of organic matter floating in the air; and thence come all specific and contagious diseases. This organic matter may be present in the form of impalpable particles, or of moist or dried epithelium and pus-cells. It may be contained in the substances discharged or thrown off from the body, as in the discharges from the nose, throat, and lungs, of measles, scarlet fever, diphtheria, and whooping-cough patients; or in the epidermic scales of measles or scarlet fever or erysip-

elas, or in the crusty scabs and pus of small-pox; or in the putrefactive changes in the discharges of typhus fever, cholera, dysentery, etc. And from the ease with which, in many cases, organic matters are absorbed by hydroscopic substances, it would appear that they may often be combined with, or condensed in, the water of the atmosphere.

The specific poisons differ greatly in the ease with which they are oxidized and destroyed. Thus, the poison of typhus exanthematicus is very easily got rid of by free ventilation, by means of which it is diluted and oxidized, so that it becomes innocuous at the distance of a few feet. (But if the streets, gutters, and sewers of houses in which typhus prevails are loaded with filth, and the scanty back yards are defiled by offensive cesspools and privies, free ventilation with pure air is impossible; then the volatile poison of typhus fever may unite itself with the impurities of the atmosphere, and perhaps convert the whole into a virulent miasma.) This is also the case with the poison of Oriental plague. But the poisons of small-pox and scarlet fever will spread in spite of very free ventilation, and they retain their power of causing the same disease for a long time, and, in the case of scarlet fever, for months. (Then the scabs and epidermic scales are doubtless the active agents of propagation. In the one case, the poison may be a mere cloud of molecules; in the other it may be contained in the epithelium and pus-cells, thrown off from the skin in both cases, and from the throat also in one, which adhere to walls, clothing, or carpets, become partially dry; but then, becoming dislodged by sweeping, dusting, etc., are blown up into the air and inhaled into the lungs of some one, where they again become active by means of warmth and moisture. Thus scarlet fever, measles, small-pox, diphtheria, whooping-cough, typhus fever, etc., come up from the tenement houses and filthy parts of the cities, and are distributed to the well-to-do and wealthy. Convalescent small-pox and varioloid patients return to their work with their hair filled with crusts and scabs, and their clothes defiled with dried pus.

Scarlet fever and measles convalescents visit the houses of their patrons and friends with their unwashed heads filled with the scurf of measles and scarlet fever scales, and scatter it broadcast into the air, from whence it is inhaled into the nostrils, throat, or lungs, of some unsuspecting creature. They come also with their clothes contaminated with the dried expectoration of their children suffering with diphtheria and whooping-cough, and shake the dust of these poisons in the houses of the rich and philanthropic. Weavers, lace and ribbon makers,

just recovering from small-pox, contaminate the new goods they manufacture, and dirty bank bills are often smeared with the same dangerous elements.—Ed.—*New York Med. Gazette.*

WISCONSIN STATE MEDICAL SOCIETY.

The meeting of the State Medical Society convened at the State Agricultural Rooms at 4 P.M., June 10th, 1868. Dr. H. Van Dusen, President, in the chair. Dr. H. P. Strong, Secretary, not being present, Dr. A. J. Ward, of Madison, was appointed temporary Secretary.

On motion of Dr. Brown, Drs. Carr and Dalton were appointed, *pro tem.*, to act as Censors, in place of those absent.

CREDENTIALS OF APPLICANTS EXAMINED.

Those presented were: Isaac E. Thayer, Brandon, Fond du Lac Co., graduate of Rush Medical College, also of University of Illinois; Antinous A. Rowley, Middleton, Dane Co., Rush Medical College; A. H. Salisbury, Mazo, Maine, graduate of Bellevue Hospital Medical College; I. J. Whitney, Prairie du Chien, graduate of Buffalo Medical University; vouched for by Drs. Mason and Favill. L. G. Armstrong, Boscobel, graduate of Rush Medical College; vouched for by Drs. Mason and Corey. D. M. Bond, Johnstown, Rock Co., graduate of Chicago Medical College; James Cody, Watertown, Jefferson Co., graduate of Harvard, Mass.; Henry M. Lilley, Fond du Lac, Wis., graduate of Medical Department of the University of Michigan; vouched for by Dr. Isaac E. Thayer, Brandon.

On motion of Dr. Taggart, of Beloit, the above-mentioned gentlemen were duly elected members of the Society.

On motion of Dr. Favill, the new members were allowed all the privileges of the Society in the discussions that may arise before the arrival of the Secretary and Treasurer.

There was some discussion as to whether the Society would grant diplomas, and, if so, on what basis.

On motion of Dr. Marks, adjourned to 7½ o'clock.

7½ P.M.

Reports of Standing Committees were passed over until to-morrow morning.

Dr. Marks moved to adjourn, which was lost.

Dr. Taggart moved that miscellaneous business be taken up. Carried. He also suggested that some action should be taken with regard to examinations for life insurance.

Dr. Cody suggested that something should be done, in petitioning the Legislature, with regard to services as experts in medical testimony.

On motion of Dr. Marks, it was resolved that a committee of three be appointed by the President, to ask such legislation as they may think proper on the subject. Carried.

Dr. Marks moved that Dr. Strong receive from the Society $25, to pay his clerk-hire, which was carried.

Drs. Cody, Carr, and Barrett were appointed by the Chair, to ask some legislation for pay as experts, in giving medical testimony.

Dr. Whiting moved that another committee be added to our list—which comes under the head of *Mental and Nervous Diseases*. Carried. Drs. Van Nostrand, Stoddard, and Corey were appointed on that committee.

Dr. Cody reported a case of fracture of the ribs. The interesting part of the case was, the extensive emphysema that ensued—it having extended over the whole body. There was also extensive hemorrhage of the lung.

Dr. Whiting spoke of the danger of fracture of the ribs; did not believe that in half of the cases reported there was any fracture.

Dr. Taggart thought the danger depended upon the displacement of the bone.

Dr. Barrett said he had known of 10 or 12 cases, that had been reported in his town, and he did not know of but two of the cases that were really fractured.

The Censors then made the following report:—

"Your Censors, having examined Dr. Mayham, concur in recommending him for membership, as much upon the endorse-

ment of his neighboring practitioners as upon the result of the examination. We would further state, we cannot recommend him for a diploma.

[Signed,] "N. DALTON,
"JAS. BROWN,
Adopted. "*Censors.*"

On motion, adjourned until 8 o'clock to-morrow morning.

A. P. WARD, *Sec'y, pro tem.*

June 11, 1868, 8 o'clock A.M.

Meeting called to order by President Van Dusen. Present —Drs. Van Dusen, Strong, Ferrin, Brown, Favill, Ward, Thayer, Carr, Taggart, Dickson, Mason, Marks, Dalton, Corey, Stoddard, Whiting, Barrett, Ellsworth, Benson, Linde, Coolidge, Cody, Armstrong, Whitney, Bond, McKennan, Lilly, Mayham, Millard, N. C. Rowley, A. A. Rowley, Jones, and President Chadbourne.

Gov. Fairchild presented an invitation to the gentlemen of the Medical Society to spend the hour of 7 to 8 o'clock at his house, this evening. Accepted.

Minutes of last meeting read and approved. Report of Secretary accepted.

Dr. Brown offered the following resolution, *viz.*:—

Resolved, That the Board of Censors having examined the qualifications of Dr. T. F. Mayham, and reported favorably thereon, he be admitted to membership in this Society.

Dr. Favill moved that the Censors have leave to withdraw their report on the case of Dr. Mayham, made last evening. Adopted.

On motion of Dr. Favill, the resolution offered by Dr. Brown was then accepted as a report of the Censors.

Moved, by Dr. Taggart, that Dr. Mayham be elected a member of this Society. Motion lost.

Moved, by Dr. Strong, that the rules and regulations relative to the admission of members be suspended during action on the case of Dr. Mayham, and that hereafter the Censors are instructed not to entertain any application for membership,

unless the applicant shall conform to the rules then existing as to admission to membership in this Society. Adopted.

On motion of Dr. Ward, the motion rejecting Dr. Mayham was reconsidered.

On motion of Dr. Ward, he was then elected a member.

Dr. Brown then offered the following resolution, which was adopted:—

Resolved, That in explanation of the action of the Society heretofore upon the subject of admission to membership, the following conditions are required:—The applicant shall present to the Board of Censors a diploma from a regular school of medicine, of good repute; or a certificate or diploma of membership in a county or district society, accompanied with a certificate of six years' practice, and of good moral and professional character; or he shall submit to such an examination as the Censors may impose.

Censors reported in favor of admitting Dr. F. R. Millard, of Beetown, graduate of Rush Medical College, to membership. Report adopted, and he was elected a member.

Dr. Ward asked leave to present a patient to the Society for opinion as to the nature of the disease, which was granted, and an examination made by the members of the Association present. The patient was a lady of about 30 years of age. After confinement some time since, she left her bed rather too early, and was attacked with roaring in the right side of the head. This is constant, and very annoying. Instant relief is obtained by pressure upon the common carotid artery, and remains so long as the pressure continues. This is the only means by which relief is afforded. There was a diversity of opinion as to the nature of the difficulty, and no definite conclusion obtained.

Dr. Marks, Chairman of the Committee on Surgery, made a report at length on treatment of fractures of the thigh. The report goes on to prove, by the best authority, that oblique fractures of the femur in adults nearly always results in more or less shortening. He also proved that the majority of surgeons prefer the straight position in treatment of these frac-

tures; and goes on to say, that, "when there is displacement of the fragments, the points of bone must be in contact with the soft parts, and that any unnecessary handling or twisting of the limb inflicts injury upon the muscles, and other tissues, which taxes nature to repair. Gentleness is not incompatible with good surgery, although there are men who, judging from their method of manipulation, would differ with me. Those claiming to be good surgeons, often inflict an amount of unnecessary injury to the soft parts, in their examination, that takes nature weeks, I might say, months, to repair." The treatment he has adopted and prefers is to use extension by means of adhesive plaster applied to the leg, terminating below the foot, to which is attached a weight running over a pulley, varying in size from 8 to 20 pounds in adult cases. A sand-bag is placed on each side of the limb, and the foot of the bed-stead elevated 3 or 4 inches, the weight of the body being the counter-extension.

When the fracture occurs below the lesser trochanter, he applies pasteboard splints the whole length of the limb, upon either side—using the extension as before indicated.

"The advantages claimed for this method are:—First, ease and comfort to the patient. Second, the dressing does not interfere in the least with the circulation in the limb. Third, the limb can be seen at all times; and, in case of compound fracture, the wound can be dressed as often as desirable. Fourth, the limb can be dressed and placed in position in one-fourth the time required to apply the splint and roller. Fifth, I claim better results from this method than from any other I have ever seen tried, though I do not pretend that it will always prevent shortening."

In fractures within the capsule, or partly within, he uses only sand-bags, with the weight and pulley, as before alluded to.

Dr. Marks gave several cases treated in this manner; and the result warrants a general trial.

Dr. Mason, of Prairie du Chien, was called upon to give the result of his experience in the treatment of fractures without splints.

He made a statement, that he had treated fractures of the femur and tibia by the use of sand-bags and the weight, with good success; and had also used the same treatment for synovitis, with good results.

Dr. Marks reported at the previous meeting a case of aneurism of the subclavian artery, then under treatment, and for which he had amputated at the shoulder-joint. The patient recently died, and he presented a full written report of the case, with a statement of the appearance of the tumor after death.

Dr. McKennan, of Sauk City, presented a written report of a case of shoulder presentation, where the uterus was ruptured during the act of version. The child was immediately delivered, and the mother recovered.

He also presented the written report of another case, where the woman was very short of stature, but stout and robust, and had a deformity of the pelvis, from an undue prominence of the promontory of the sacrum. Antero-posterior diameter less than three inches. She had borne twelve children, nine of which had been delivered with instruments, and were dead. The 10th, 11th, and 12th were very small, and were born without instrumental aid. He was called to her in her 13th confinement, and found the pains strong, and the head presenting, and pressing strongly against, and partially engaged in, the brim of the pelvis; and so it remained for 12 hours. The Doctor then turned the child, and delivered it by the feet—considerable force being required to extricate the head. The child was alive, and weighed some ounces over 13 pounds.

The report of this case gave rise to some discussion as to the practicability of turning in such cases—some apprehending that in most cases the head could not be extricated.

Dr. Dalton, of Mineral Point, made an extended report of a case of aneurism of the axillary artery, which terminated in death.

The patient presented himself "with a large pulsating tumor in the left axilla, a small part presenting above and within the acromial articulation of the clavicle, the scapula considerably elevated, a pain, at times, in the left arm, with considerable

swelling, and at all times a numbness, or, as he expressed it, a 'dead-feeling, extending to the ends of his fingers.'" He goes on to give a history of the case from the first appearance of the tumor. Told the patient the only remedy was ligation, and that the result would probably be fatal under any method of treatment. He decided to have the operation performed, and Dr. Dalton tied the left subclavian artery, at the outer margin of the external scalenus muscle, following the form of incision introduced by J. Kearney Rodgers.

The operation was followed by sensible diminution in the size of the tumor, and coldness of the whole surface of the arm. Case did well up to the 24th day, when the ligature came away, followed by slight hemorrhage. Incision had entirely healed, except that portion about the ligature—warmth nearly restored, and tumefaction almost disappeared.

The case went on until the incision entirely healed, and in six days he was discharged as cured.

The operation was performed in November, and on the 7th day of March following, he felt pain in the back and right shoulder, and on the night of the 10th he suddenly expired.

Dr. Dalton closes his report, which is given in detail, as follows:—

"I requested a *post mortem*, but could not prevail upon them to grant it. Therefore, of what he died I am wholly ignorant, but, from their description, came to the conclusion that it might have been angina pectoris. They stated he had been suffering, as usual, with his pain, when he suddenly threw his right hand to his left side, and screamed with pain; turning himself partially over, he became some easier, but his ease was of short duration. In from three to five minutes he acted in the same manner, and expired.

"Whether this could in any way be connected with the aneurism or operation, is a question I leave to the profession to decide."

Adjourned to 1½ o'clock.

1½ o'clock.

The Committee on Practical Medicine was not ready to re-

port, and was continued, with the exception of the Chairman. Dr. C. J. Taggart, of Beloit, was appointed Chairman.

Dr. Ferrin, of the Committee on Practical Medicine, made a verbal report of an anomalous case of pain and irritability of the urethra.

The subject of puerperal convulsions having been incidentally brought up, a very general and animated discussion upon the pathology and treatment followed. President Van Dusen left the chair and participated, in his usual pointed and energetic style; he was full of the subject. Being an elderly gentleman, of large experience and close powers of observation, he was pretty good authority upon this subject. His opinion was, that it usually occurred in persons of plethoric or full habit, and bleeding was the remedy. Such had been his practice, and he had never lost a case. He had but little faith in anæsthetics without bleeding, and such appeared to be the general opinion.

Most of the afternoon was consumed in the report of cases and general discussion.

President Chadbourne, of the State University, appeared, and was introduced by President Van Dusen. He gave some practical remarks upon the duties and requirements of the medical profession. He introduced the subject of establishing a medical school within the State under the law creating the University, and said, as one of the members of the committee appointed by the Regents to take into consideration the practicability of a school to be established at Milwaukee or elsewhere, he felt desirous to advance the project, but he felt that the initiative should be taken by the State Medical Society, as it must in a great measure depend upon it for its support and direction, and he hoped that the Society would take action upon this when it seems to be desirable to organize such a school.

The subject of treatment of rheumatism was under discussion for some time, and the majority seemed to favor alkalies as the most efficacious remedies.

On motion of Dr. Marks, of Milwaukee, Dr. Taggart, of Beloit, was requested to furnish a written report of a case of

spontaneous rupture of the sphincter ani; also, that Dr. McKennan, of Sauk City, be requested to furnish a written report of his treatment of fracture of the malar bone; and Dr. Cody, of Watertown, of a case of emphysema.

Dr. Van Dusen announced the death of Dr. J. B. Dousman, and moved that a committee be appointed to give a biographical sketch of Dr. Dousman at the next meeting. Adopted. Dr. Whiting, Vice-President, in the chair, appointed Dr. H. Van Dusen.

On motion, Drs. Jesse Moore, of Beloit, and Azariah Blanchard, of Milwaukee, were elected honorary members.

On motion, a standing committee of three was appointed to report on new remedies. Chair appointed Drs. Cody, Corey, and Mason.

On motion of Dr. Whitney, of Prairie du Chien, a committee on diseases of the eye and ear was appointed. Chair appointed Dr. Whitney.

Dr. Mason presented a biographical sketch of Dr. B. F. White, deceased, and a report was presented by Dr. Treat on the life of Dr. C. S. Farr, deceased.

A communication from Dr. Storrs Hall, of Rosendale, was presented, regretting his inability to attend.

On motion of Dr. Marks, the Secretary was instructed to furnish the Chicago medical journals with a synopsis of the proceedings.

Moved, by Dr. Marks, that the Constitution, By-Laws, and Code of Ethics, with the Proceedings, be published in pamphlet form, and distributed to the physicians generally in this State. Adopted.

Dr. Whiting presented the following resolution, which was adopted:—

Resolved, That whenever any member shall have neglected to pay his annual dues to this Society for the period of three years, his name shall be stricken from the rolls of the Society, in disgrace; provided, however, that the Secretary shall previously send him a copy of this resolution.

Dr. Dalton offered the following:—

Resolved, That when we adjourn we adjourn to meet on the 3d Wednesday of June next, at the city of Madison. Adopted.

Dr. Barrett offered the following:—

Resolved, That in view of the increasing population of Wisconsin and other Northwestern States, a larger number of well and thoroughly educated medical men are demanded to meet the wants of the community, the time has come for the establishment of a medical school in this State, under the auspices of the State Medical Society.

Resolved, That a committee of three be appointed to confer with a similar committee recently appointed by the regents of the State University, in regard to the immediate establishment of such a school.

Laid over to next meeting.

A committee of one from each Congressional District to furnish the Secretary the names of physicians in the State, was appointed, as follows:—

First District—Dr. Marks, Milwaukee.

Second District—Dr. Favill, Madison.

Third District—Dr. Dalton, Mineral Point.

Fourth District—Dr. Lilley, Fond du Lac.

Fifth District—Dr. Russell, Oshkosh.

Sixth District—Dr. Thayer, Brandon.

Moved by Dr. Strong, that a committee on Pathology and a committee on medical education be appointed. Adopted,

The Chair announced the standing committees for the ensuing year as follows:—

Arrangements—Drs. Brown, Favill, and Ward.

Surgery—Drs. Marks, Dalton, Palmer.

Obstetrics—Drs. McKennan, Barrett, Thayer.

Pathology—Drs. Stoddard, Bond, Armstrong.

Practice—Drs. Taggart, Vivian, Ferrin.

New Remedies—Drs. Cody, Corey, Mason.

Executive Committee—Drs. Carr, Dickson, Salisbury.

Medical Education—Dr. Carr.

The thanks of the Society were tendered to Gov. Fairchild for the hospitality of this evening.

Adjourned. H. P. STRONG, *Secretary.*

The Clinique.

CLINICAL CASES OF CONTINUED FEVER.—IMPORTANT THERAPEUTICAL ITEMS.—THE VALUE OF STRYCHNINE IN CERTAIN PATHOLOGICAL CONDITIONS.

By N. S. DAVIS, M.D., Professor of Principles and Practice of Medicine in Chicago Medical College, and of Clinical Medicine in Mercy Hospital.

Case I. A. B., aged about 22 years, was admitted to the medical wards of Mercy Hospital, October 17th, 1868. He was reported to have been sick in bed one week, but we could learn nothing reliable, concerning either his symptoms or treatment, during that time. At the time of admission, his expression of countenance was dull; the surface, especially of the face, hands, and neck, was suffused with a dark, dingy redness, dry, and temperature moderately increased; pulse 120 per minute, quick, and weak; lips and mouth dry; tongue covered with a thick coat, dry and brown along the middle of the dorsal surface; abdomen moderately distended, tympanitic, and presenting a few small, red papules on its surface. He was reported to have had five or six thin intestinal evacuations per day, for two or three days past. The chest was resonant and natural, except dry bronchial râles over both sides. The mental faculties dull, drowsy, and wandering, so much so as to render him incapable of giving any reliable intelligence. His muscular movements were unsteady and tremulous.

He was directed to have two or three tablespoonsful of sweet-milk and wheat-flour porridge every two hours for nourishment, with whey, bread-water, or milk and water for drink; and a teaspoonful of the following emulsion every three hours:—

℞. Ol. Terebinth., ---------- ---------- ℥iij.
Tinct. Opii, ---------- ℥iij.
Pulv. G. Arabic, White Sugar, } āā, ---------- ℥iij.
Rub together, and add Mint Water, -- ℥iij.

Mix.

He continued this treatment two days, during which time his bowels remained quiet; but his urine passed involuntarily, and he continued to exhibit all the symptoms of a strongly-marked typhus condition. The abdomen was full and tense, the pulse very soft and frequent, and the mind somnolent and muttering.

On the evening of the 19th, an enema of warm water was administered, which was followed by a moderate evacuation of fæcal matter and some flatus. During the latter part of the night he had another large evacuation in bed, which was thin and freely intermixed with blood, and the urine continued to pass without his notice. At the clinic hour on the 20th, the whole cutaneous surface was dingy, with slowness of capillary circulation; the mouth and tongue very dry, with constant tendency to gather dark sordes on the lips and teeth; mind very somnolent and muttering; respiration slow and irregular, with sharp, dry, bronchial râles; pulse 128 per minute, and weak; but less distention of the abdomen than previously. It was evident that the depression of the excito-motory nervous centres, as indicated by the slow and irregular respiration, feeble circulation, and relaxation of the sphincters, was directly threatening the life of the patient; while the copious intestinal discharge, largely intermixed with dark blood, indicated a condition of the mucous membranes scarcely less critical.

To counteract, as far as possible, the first of these pathological conditions, the patient was directed to have a teaspoonful of the following formula every four hours:—

℞. Strychnine, ---------- 1 gr.
Nitric Acid, ---------- ʒj.
Tinct. Opii, ---------- ʒiij.
Simple Syrup, Water, } āā, ---------- ʒiss.
Mix.

To aid the mineral acid and opium in restraining the further intestinal discharges, the emulsion of oil turpentine and tincture of opium was continued, in doses of a teaspoonful between each of the doses of the solution containing the strych-

nine. For nourishment, he was fed regularly two or three tablespoonsful of sweet-milk and wheat-flour porridge every hour, sometimes exchanging it for the same quantity of beef-tea, well salted. No further intestinal evacuations occurred, and after about 36 hours he ceased to dribble his urine in bed, and voided it regularly.

After he had followed this treatment punctually for three days, he became less somnolent, and exhibited less muttering and subsultus, but his skin remained dry; pulse soft, frequent, and weak; tongue dry, with dark sordes on the lips and teeth; bronchial rhonchi over both sides of the chest, with dulness over the lower and posterior parts; and abdomen tympanitic.

The same treatment was continued, with the addition of a warm-water enema, which procured a slight movement of the bowels, until the 27th of October. During the 25th, 26th, and 27th, the patient gradually passed from his state of somnolency and muttering to that of morbid vigilance or constant wakefulness, with less subsultus, and a slight improvement in the condition of the mouth and tongue, but the mind still wandering; pulse soft, weak, and frequent; and commencing bed-sores over the sacrum and trochanters. Thinking that the change from mental drowsiness to constant wakefulness might be the result of the continued action of the strychnine on the nervous centres, directions were given to have the interval between the doses extended to six hours, and fifteen grains of bromide of ammonium to be given at bedtime; all other directions the same as before.

On the 28th, it was found that the bromide had failed to procure sleep, although the dose was repeated a second time, and the patient appeared in all respects more exhausted and unfavorable than on the day previous. The emulsion and the strychnine solution were again given, at intervals of four hours, or two hours apart; and instead of trying further the bromide to overcome the morbid vigilance, fifteen drops of chloroform were added to each dose of the emulsion. The nourishment to be continued as before.

This treatment was continued until November 1st, with a

very gradual but marked improvement in the condition of the patient.

The febrile heat had diminished; the skin was better color; sordes gathered less rapidly on his lips and teeth; the edges of the tongue were moist, though the middle was still dry and fissured; the mind less wandering, with intervals of quiet sleep. The bowels had not moved except by means of a warm-water enema, which had been given about once in three or four days. The last enema was followed by an evacuation of firmly-consistent, healthy-looking fæces. The strychnine solution was still continued every four hours, but six grains of Dover's powder and four of pulverized gum camphor were given instead of the emulsion of turpentine, etc.

Two days later, November 3d, it was found that the symptoms of convalescence had vacillated, being much more prominent every alternate day, and two grains of sulphate of quinine were given between the doses of strychnine solution, while the Dover's powder and camphor were limited to a single dose at night. This treatment was continued until May 9th, when convalescence was fully established. The bed-sores over the sacrum and trochanters had been treated by an application of the tincture of the chloride of iron, daily, and were improving; but the patient was very feeble.

The solution containing strychnine and nitric acid was continued every six hours, with the quinine between.

On the 11th, the solution was restricted to a teaspoonful three times a day, and the quinine to twice a day. From this time the patient gained rapidly, until his recovery was complete.

Case II. Mr. R., aged 25 years, was admitted into the hospital in the early part of November. About six days previously, he had been attacked with a chill, so decided as to make him think he had the commencement of an intermittent. He had felt unwell during the preceding three or four days. When the chill occurred, he called a physician, who gave some powders, and followed them by a cathartic. The latter operated

freely, and during the succeeding three days he had from twelve to fifteen intestinal discharges per day.

It was at the end of these three days that he was brought to the hospital. On examination, it was found he was laboring under all the symptoms of continued fever, with great exhaustion.

He was first given the emulsion of oil of turpentine and tincture of opium, in doses of a teaspoonful every three hours, until the intestinal discharges should be stopped; with milk and flour porridge for nourishment. The next day his bowels had become quiet, but he presented every symptom of profound typhus:—countenance dull; color of skin brown or dingy; capillary circulation feeble; pulse 124 per minute, soft and weak; abdomen slightly tympanitic, and bowels quiet; some subsultus, and constant delirium; and once hemorrhage from nose. A slight papular eruption was discernible over his chest and abdomen. He continued the emulsion three times a day, and in addition took a teaspoonful of the solution of strychnine, nitric acid, and tincture of opium every four hours, same proportions as already stated in the preceding case; and the same strict attention to the giving of bland nourishment.

The further increase of prostration was arrested in twenty-four hours, but the same treatment was continued, without change, for one week; during which time, a slow but steady improvement took place.

The emulsion was then discontinued; the strychnine solution continued every six hours, with two grains of quinine alternated with it, and convalescence was fully established at the end of the second week after admission into the hospital.

Case III. Mr. H., native of Ireland, aged 27 years; laborer; had been sick four weeks before admission into the hospital. At present, countenance dull; skin dry, congested, above the natural temperature; lips thin, retracted, and teeth covered with dark sordes; tongue covered with a dark-brown, dry coat, fissured; mouth dry; mind dull and wandering; much subsultus, the hands trembling constantly, and the tongue so tremulous that he could neither run it out nor speak plainly. His

urine dribbled in bed, and a somewhat extensive superficial bed-sore existed over the sacrum. The abdomen was neither distended nor tympanitic, but he had from one to three thin fæcal evacuations daily. Pulse 130 per minute, soft and weak; respiration accelerated, but no thoracic dulness or bronchial râles.

In this case, impairment of the functions of the nervous centres and the general exhaustion were so prominent, that the patient was given at once the same strychnine and acid solution used in the other cases, in doses of a teaspoonful every four hours; five grains each of pulv. Doveri and pulv. g. camph. at night; and the prompt attention to nourishment, consisting of sweet-milk and wheat-flour porridge, and beef-tea salted with chlorate potassa, given in small but frequently repeated doses.

On the third day, he had so much improved that he could speak plain, protrude his tongue readily, and there was but little tremor of the extremities. The strychnine solution was then given only once in six hours, and a powder consisting of sulph. quinine 2 grs., pulv. Doveri 5 grs., pulv. g. camph. 3 grs., was given alternately with it; with same attention to diet as before. He continued steadily to improve, and in eight days after his admission into the hospital (five weeks from the commencement of his fever), his convalescence was fully established.

These cases strikingly illustrate a most important stage in the progress of the more severe cases of continued fever. It is a stage in which, in addition to the ordinary deterioration of the blood, and more or less local changes in the abdomen and chest, we have great depression or failure in the functions of the nervous centres; as indicated by the soft, weak pulse, the muscular tremors, the relaxation of the sphincters, etc. To counteract this condition, we have found no remedy equal in value to strychnine in solution with nitric acid, as given in the preceding cases. Tincture of opium is added, whenever the intestinal discharges are thin, or too frequent.

Book Notices.

The Opium Habit, with Suggestions as to the Remedy. New York: Harper & Brothers, Franklin Square. 1868.

This is a neatly-published volume of 334 pages. Its contents are as follows:—Introduction; A Successful Attempt to abandon Opium; De Quincey's "Confessions of an English Opium-Eater"; Opium Reminiscences of Coleridge; William Blair; Opium and Alcohol Compared; Insanity and Suicide from an Attempt to abandon Morphine; A Morphine Habit overcome; Robert Hall—John Randolph—William Wilberforce; What shall they do to be Saved? Outlines of the Opium Cure. From these headings, every reader will be able to judge concerning the contents of the book. It is well calculated to interest and instruct both non-professional and professional readers.

For sale by S. C. Griggs & Co., Chicago. Price, $1.50.

A Treatise on Physiology and Hygiene; for Schools, Families, and Colleges. By J. C. Dalton, M.D., Professor of Physiology in the College of Physicians and Surgeons of New York. With Illustrations. New York: Harper & Brothers, Publishers. 1868.

This is a small octavo volume of near 400 pages, printed on good type and paper, with many cuts as illustrations. The author has succeeded well in presenting the leading facts of physiology and hygiene, in a small compass, well arranged for study in schools and academies, and for reference by the general reader.

For sale by S. C. Griggs & Co., Chicago. Price, $1.75.

Lectures on the Study of Fever. By Alfred Hudson, M.D., M.R.C.A., Physician to the Meath Hospital. Philadelphia: Henry C. Lea. 1869. For sale by W. B. Keen & Co., Chicago.

This is a full-sized octavo volume of 316 pages. The pub-

lishers have done their part of the work well; and the author has given a very interesting discussion of the whole subject of fevers.

Annual Report of the Surgeon-General of U. S. Army for 1868.

We have received a copy of the Surgeon-General's Annual Report, and read it with interest and pleasure. Below, we copy the greater part of the report:—

At the date of my last Annual Report, epidemic cholera and yellow fever prevailed among the troops in various sections of the country, a very full and exhaustive report of which was published for the information of medical officers of the army, in Circular No. 1, War Department, Surgeon-General's Office, June 10, 1868. To this date, there has been no well-authenticated case of epidemic cholera or yellow fever reported as occurring among troops in the present year.

The Monthly Reports of sick and wounded, for the fiscal year terminating June 30, 1868, received in the Division of Records of this Office to this date, represent an average mean strength of forty-five thousand two hundred and fifty-seven (45,257) white, and four thousand seven hundred and seventy-four (4,774) colored, troops.

For the *white troops*, the total number of cases of all kinds reported under treatment was one hundred and thirty-one thousand five hundred and eighty-one (131,581), or two thousand nine hundred and eight (2,908) per thousand (1,000) of strength —nearly three entries on the sick report, during the year, for each man. Of this number of cases, one hundred and eighteen thousand nine hundred and twenty-five (118,925) were for disease alone, and twelve thousand six hundred and fifty-six (12,656) for wounds, accidents, and injuries; being two thousand six hundred and twenty-eight (2,628) per thousand (1,000) of strength for disease, and two hundred and eighty (280) per thousand (1,000) of strength for wounds, accidents, and injuries. The average number constantly on sick report was two thousand eight hundred and fifty-two (2,852), of whom two thousand five hundred and ten (2,510) were sick and three hundred and forty-two (342) wounded, or fifty-five (55) per thousand (1,000) constantly under treatment for disease, and eight (8) per thousand (1,000) for wounds and injuries. The total number of deaths from all causes reported, was one thousand

three hundred and fifty-three (1,353); of which, one thousand one hundred and seventy-five (1,175) were from disease, and one hundred and seventy-eight (178) for wounds, accidents, and injuries; being at the rate of twenty-six (26) deaths from disease and four (4) from wounds, to each thousand (1,000) of strength. Of the deaths from disease, four hundred and twenty-seven (427) were from yellow fever, one hundred and thirty-nine (139) from cholera, and six hundred and nine (609), or thirteen (13) deaths per thousand (1,000) of strength, from all other diseases. The proportion of deaths from all causes to cases treated, was one (1) death to ninety-seven (97) cases.

Nine hundred and eighty-four (984) white soldiers, or twenty-two (22) per thousand (1,000) of strength, were discharged upon Surgeon's certificate of disability.

For the *colored troops*, the whole number of cases, of all kinds, treated, was fourteen thousand six hundred and sixteen (14,616); being at the rate of three thousand and sixty-one (3,061) per thousand (1,000) of strength, or three (3) cases of sickness for each man. Of this number, thirteen thousand five hundred and fifty (13,550) were for disease; being two thousand eight hundred and thirty-eight (2,838) per thousand (1,000) of strength; one thousand and sixty-six (1,066) were for wounds, accidents, and injuries; being two hundred and twenty-three (223) per thousand (1,000). The average number constantly on sick report was two hundred and eighty-three (283); of whom two hundred and forty-eight (248) were sick, and thirty-five (35) wounded; being at the rate of fifty-two (52) per thousand (1,000) constantly under treatment for disease, and seven (7) per thousand (1,000) for wounds, accidents, and injuries.

The total number of deaths reported was two hundred and sixty-eight (268); of which, two hundred and forty-two (242) were from disease, twenty-six (26) from wounds and injuries; being at the rate of fifty-one (51) deaths per thousand (1,000) of strength from disease, and five (5) per thousand (1,000) from wounds. Of the deaths from disease, twenty-five (25) were from yellow fever, eighty-nine (89) from cholera; leaving one hundred and twenty-eight (128), or twenty-seven (27) per thousand (1,000) of strength, from all other diseases. The proportion of deaths from all causes to cases treated, was one (1) death to fifty-five (55) cases.

Ninety (90) colored soldiers, or nineteen (19) per thousand (1,000) of strength, were discharged on Surgeon's certificate of disability.

During the year, the records filed in the Record and Pension

Division of this Office have been searched, and such official information relative to deaths, discharges, and treatment as they contain has been furnished, in reply to the inquiries of the Pension Bureau, in 16,786 cases; Adjutant-General, U.S.A., in 15,582 cases; Paymaster-General, U.S.A., in 473 cases; and in 1,929 cases to other authorized inquirers; making a total of 34,770.

In the Division of Surgical Records, the histories of 74,954 cases of wounds and injuries have been transcribed, chiefly from field reports, hospital case-books, and registers of 1861 and 1862, and the earlier part of 1863.

The records of the Office, in regard to injuries of the head, face, neck, thorax, abdomen, spine, and pelvis, have been classified and studied. Illustrative cases have been selected and written out in minute detail, while numerical tables have been prepared, exhibiting the progress and results of the different classes of injuries to which these individual examples belong. To illustrate these injuries, for future publication, there have been completed, during the year, 8 chromo-lithographs, 8 lithographs, and 3 diagrams. There have also been prepared, during the year, 122 woodcuts, to be intercalated in the text, descriptive of the various classes of injuries and operations. 500 pages of manuscript are in readiness for the printer, and a large amount of the statistical material is in such a state of forwardness that it can be made ready for the press at a few weeks' notice. To make the publications of this Office as valuable as possible, in relation to the results of the major surgical injuries and operations, and especially in regard to the excisions of the larger joints, and other operations embraced under the general designation of conservative surgery, much time and labor have been expended in tracing the ultimate histories of patients who have undergone such mutilations. This has been accomplished to a very satisfactory degree, through the coöperation of the examining surgeons of the Pension Bureau, of the Surgeons-General and Adjutants-General of the several States, of retired volunteer medical officers, and of private physicians. Besides the digestion and tabulation of the surgical data pertaining to the late war, there have been received and consolidated, 699 quarterly reports of post-hospitals, 34 reports of the examination of men, who, having been wounded, presented themselves for reënlistment at recruiting stations, and 32 special reports of surgical operations.

The Army Medical Museum continues to increase in value and usefulness. During the year, 673 specimens have been

added to the surgical section, 121 to the medical section, 202 to the section of comparative anatomy, 687 specimens and 114 photographic negatives of microscopical specimens to the microscopical section. An anatomical section, of 163 specimens, has been formed, and is rendered of especial interest by the large proportion of typical crania of the North American aborigines which it contains. A collection of 187 specimens of Indian weapons and utensils has also been added. 266 discarded specimens, the histories of which could not be found at the period of publication of the catalogue of the surgical section, have been identified and restored to the collection. For purposes of exchange with other museums, or with learned societies, either for specimens or publications, 4,472 photographs, illustrative of injuries and operations, have been printed. There were, during the year, 14,448 visitors to the Museum, including many military surgeons of eminence.

On the 30th of September, there were 289 garrisoned posts in the various Military Departments, besides an almost equal number of detachments on temporary duty, throughout the South, and on expeditions, or protecting the lines of travel on the plains, requiring medical attendance. The number of surgeons and assistant-surgeons being altogether inadequate to meet this demand, it has been necessary to employ contract-physicians, especially at the South, where but few of the resident physicians could take the oath necessary to their payment, and the fees for attendance in individual cases would be far in excess of the contract rates. The number of physicians so employed upon the 30th of September was 282, at rates of compensation varying from $45.00 to $125.00 per month; but a large proportion of these will be dispensed with so soon as the troops are concentrated in winter-quarters, and the condition of public affairs will admit of the discontinuance of the numerous small garrisons throughout the States recently in rebellion.

Since the date of my last Annual Report, 3 surgeons and 2 assistant-surgeons have died, 8 assistant-surgeons have resigned, 2 assistant-surgeons have been dismissed, and 1 assistant-surgeon cashiered—total, 16.

A medical board, for the examination of candidates for appointment as assistant-surgeons, U.S. Army, and of assistant-surgeons for promotion, is now in session in New York City.

There are now 49 vacancies in the grade of Assistant-Surgeon. Most respectfully, your obedient servant,

J. K. BARNES,
Surgeon-General, U.S. Army.

Editorial.

NOTHING NEW.—In the clinical reports in the *Medical Record* of New York, we find on page 463 the following:—

"CASE IV. *Renal Dropsy.—Treatment by the Bichloride of Mercury.*—In the case of a man with general dropsy of four months' standing, dependent on renal disease, Dr. Flint called attention to a *new* method of treatment by the use of the bichloride of mercury in small doses. On admission, his urine contained albumen and waxy casts. Corrosive sublimate was given, in doses of $\frac{1}{32}$ part of a grain with compound tincture of cinchona. The dropsy had now nearly disappeared."

What is here spoken of as a "*new method*" of treatment for renal dropsy, was proposed and practised in New York City more than twenty years since. It was adopted in the treatment of several cases in the New York Hospital, with reported benefit. We heard it spoken of in one of the College clinics, we think, by Prof. Willard Parker.

We were at that time residing in New York City, and kept a male patient, who had been disabled by general dropsy with highly albuminous urine for six months, on the following prescription during nearly eight months, with interruptions of only a few days at a time:—

℞. Tinct. Cinchona,---------- ℥iij.
Bichlorid. Hydrarg.,---------- 1 gr.

Mix. Give one fluid drachm, in sweetened water, before each meal and at bedtime.

After he had been under treatment one month, the dropsical infiltrations had diminished so much that he could take considerable exercise, and the medicine was limited to three doses per day. At the end of eight months, there was still a little puffiness about the eyes in the morning, and in the feet and ankles at night. There were also slight traces of albumen in the urine. But he was able to do a moderate amount of manual labor every day. Ever since that time we have continued to

use small doses of the bichloride of mercury in some cases of renal dropsy, with benefit. We have generally given it dissolved in tincture of cinchona bark. Given in this manner, and in doses of $\frac{1}{24}$ of a grain or less, we have seldom known it to affect the gums of the patient, even after several weeks' continuance.

Dr. Arthur E. Peticolas, Superintendent of the Eastern Lunatic Asylum at Williamsburg, committed suicide there on the morning of Nov. 28th, by leaping from a window of the building, and dashing out his brains. He was a distinguished physician, and formerly a professor in the medical college at Richmond. His mind had been unsettled for some time past.—*Medical and Surgical Reporter.*

It is proposed by the New York Medical College for Women to educate a body of professional nurses to attend freely or for a moderate charge, persons living in boarding-houses and like places, who are not able to secure regular attendance.—*Medical and Surgical Reporter.*

Money Receipts to December 23.—Drs. W. A. Gordon, $5; E. L. Holmes, 3; J. S. Sherman, 3; N. W. Abbott, 1; W. A. Knox, 3. J. H. Rauch, 9; M. Parker, 3; R. N. Isham, 6. M. O. Heydock, 6; J. P Ross, 3; W. C. Lyman, 3; John M. Woodworth, 2; A. Groesbeck, 3; J. W. Mill, .75; John Macalister, 6; J. M. Hutchinson, 3; M. F. DeWitt, 6; D. C. Roundy, 3; W. H. Byford, 3; G. C. Paoli, 5; J. N. McLane, 6; Latta & Sparklee, 6; A. Fisher, 6; Wm. Fleming, 3; D. B. Bobb, 3; J. B. Buchtel, 6; Hosme A. Johnson, 10; M. F. Bassett, 3; J. S. Hildreth, 6; R. C. Hamill, 6; Daniel Gard 1.50; J. C. Allaben, 3; W. W. Allport, 6; A. Hager, 3; D. H. Spickler, 6; S. S. Terry, 6; H. B. Wilcox, 5; D. E. Woodward, 6; John Conant, 6; G. Wheeler Jones, 3.25; E. Ballard, 6; D. V. Cole, 6; S. Wickersham, 3; C. H. Quinlan, 9; Wolcott & Markes, 6; Wm. J. Wheelan, 3; D. M. Creed, 7.50; Geo. Fredigke, 3; Henry Sweet, 6; H. A. Allen, 6; — Cleveland, 3; J. B. Walker, 3; Daniel Duckett, 6; Theron Nichols, 2.50; R. J. Patterson, 6; G. L. Henderson, 1.50; R. Ludlam, 6; Ira Hatch, 6; J. McLaughlin, 3; Edwin M. Park, 3.

BELLEVUE PLACE,

For the care and treatment of Nervous and Insane Invalids.

Address **R. J. PATTERSON, M. D.,**

Jan. 1, 1869. **Batavia, Ill.**

RELIABLE VACCINE MATTER CAN BE HAD OF
DR S. A. McWILLIAMS,
166 STATE STREET, CHICAGO.

Mortality for the Month of November, 1868:—

CAUSES OF DEATH.

Accident, drowned	6	Enteritis, chronic,	1	Liver, inflammation of	1
" fall,	2	" and whooping-cough,	1	Lungs, congestion of	3
" run over by wagon	1	Erysipelas,	6	" " and pneumonia,	1
" railroad,	4	Fever, congestive,	3	" effusion of,	1
Angina,	2	" puerperal,	2	" emphysema of,	2
" scarlet fever & exhaustion,	1	" remittent	2	" hemorrhage of,	2
Anæmia,	1	" and enterocolitis,	1	" paralysis of,	1
Apoplexy,	1	" " pneumonia	1	" and old age,	1
Aphthæ,	1	" scarlet,	23	Measles,	2
Births, premature,	11	" " malignant,	2	Meningitis	2
" still,	48	" " and dropsy,	2	" cerebro-spinal,	3
" tedious	2	" " and convulsions,	1	" tubercular,	5
Bronchitis,	5	" " and gangrene of tonsils,	1	Mitral, insufficiency of, and albuminuria,	1
" and dropsy	1	" " and diphtheria,		Œdema pulmonium,	2
Bowels, inflammation,	2	" " and nephritis,	1	Old age,	9
Brain, apoplexy of	1	" " pericarditis	1	" and fever intermittent,	1
" dropsy of,	1	" typhoid,	20	Parotitis & fever scarlet,	1
" congestion of,	6	" " and meningitis,	1	Paralysis,	1
" " and convulsions	1	Gastro-enteritis,	1	Peritonitis,	5
" " from injury,	1	Gangrene, traumatic,	1	" acute,	1
" inflammation,	1	Glottis, spasms of,	1	" puerperal,	1
" softening of	1	Heart, dropsy of,	1	Pyæmia,	1
Cancer	1	" disease of,	5	" and compound fracture of leg,	1
" of breast,	1	" " following parturition,	1	Phthisis pulmonalis,	34
Carbuncle and Convulsions,	1	" valvulalar disease of,	1	Pneumonia,	20
Cholera infantum,	2	" mitral valve, disease of,	1	" and convulsions	1
" morbus,	1	Hernia strangulated	1	" typhoid,	1
Convulsions,	44	" incarcerated,	1	Scrofula,	1
" puerperal	1	Hydrothorax & dropsy	1	Stomach, cancer of,	4
" from overdose of drugs,	1	Hydropericardium and paralysis,	1	Suicide, poisoning,	1
Croup,	8	Hip disease	1	Tabes mesenterica,	10
" diptheretic,	1	Hydrocephalus,	5	Tongue, cancer of,	1
" membranous	1	" acute,	1	Teething,	5
Cyanosis,	1	Injuries,	1	" and scarlet fever,	1
Debility	3	Inanition,	8	Urethra, stricture of,	1
" general,	4	Intemperance and exposure,	1	Uterus, cancer of,	1
Delirium tremens,	1	Impaired nutrition,	1	" tumor of,	1
Deficient vitality,	1	Kidneys, Bright's disease of,	3	Whooping-cough,	7
Diphtheria,	10	Laryngitis,	2	" and convulsions,	1
Diarrhœa,	3			Unknown	5
" chronic,	9			Total,	401
Dropsy,	5				
" peritonitis and gangrene,	1				
Dysentery	5				
" chronic	3				
Epilepsy	1				

COMPARISON.

Deaths in Nov., 1868,	401	Deaths in Nov., 1867,	370	Increase,	31
Deaths in Oct., 1868,	448	Decrease,			47

AGES.

Under 1	116	30 to 40	42	90 to 100	1
1 to 3	57	40 to 50	32	100 to 105	1
3 to 5	32	50 to 60	18	Unknown	2
5 to 10	34	60 to 70	10		
10 to 20	15	70 to 80	10	Total	401
20 to 30	27	80 to 90	4		

Males,	221	Females,	180	Total,	401
Single,	293	Married,	108	Total,	401
White,	399	Colored,	2	Total,	401

NATIVITY.

Foreign Chicago	11	England	13	Denmark,	1
Chicago	73	Germany	45	Sweden	12
Other parts U. S.	61	Holland	3	Unknown	1
Poland.	1	Ireland	47		
Bohemia	5	Norway	10	Total,	401
Canada	4	Scotland	4		
France	2	Italy,	1		

MORTALITY BY WARDS FOR THE MONTH.

Ward.	Mortality.	Pop. in 1868.	One death in	Ward.	Mortality.	Pop. in 1868.	One death in
1	8	9,094	1,137	14	27	14,839	549
2	14	13,074	934	15	33	21,078	639
3	26	15,076	580	16	18	15,465	859
4	16	17,796	1,112	Bridewell,	1		
5	32	16,033	501	County hosp.	10		
6	25	13,083	523	Chi. River,	4		
7	42	25,492	607	Mercy Hosp.	4		
8	33	15,813	479	St. Luke's H's.	1		
9	18	19,297	1,072	Immigrants	10	St Jo. Orph. Asyl.	1
10	13	12,925	994	Hosp. of Alexian Bros.,	1	Prot. Orph. Asylum	1
11	14	14,340	1,024			Hosp. for Women and Children,	1
12	25	17,485	699			Home for Friendless,	2
13	21	11,164	531				

Total, 401

A Clerical Surgeon.—Father Heylen, a catholic priest of Boom in Belgium, performed the Cæsarian operation on a young woman in order to baptize the infant before it died. The mother appears to have been living when the operation was commenced, but both mother and child succumbed. In his defence the priest said that he performed the operation in obedience to the direct instructions of the archbishop. These instructions are now to be cancelled, and the clerical surgeon tried for murder.—*Medical and Surgical Reporter.*

THE

CHICAGO MEDICAL EXAMINER.

N. S. DAVIS, M.D., EDITOR.

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Original Contributions.

ARTICLE VI.

ANNUAL ADDRESS TO THE MONTGOMERY COUNTY MEDICAL SOCIETY, DEC. 21, 1868.

BY THE RETIRING PRESIDENT, P. B. COOK, M.D.

All annual festivities, from their very nature, gather around them a peculiar interest that marks no other. There is something in the rolling suns, the stated revolutions of the seasons, the set times for commemorating certain events, that makes them of special interest. They naturally cause us to retrospect the whole year, with its duties, privileges, comforts, blessings, joys, or perchance its afflictions and sorrows.

To the medical profession this year has been one of more than ordinary interest—developing new diseases and new remedies, or a new application of old remedies. Especially has it been a year of youthful mortality. More children have died, according to medical statistics, than for years. Recoveries from confinements have been uniformly slow. Even strong men, who have been sick at all, have suffered long and severely; and sickness generally this year has been of a graver type than usual, when no epidemic has prevailed.

But the profession has been active, vigilant, aggressive, and progressive, and, as a consequence, has been growing in efficiency, knowledge, numbers, journals, colleges, professors, and

all the means of vivifying, animating, energizing, and encouraging one another; and the world has witnessed the fact in the rapidly increasing academies of medicine, and other numerous medical associations. As a medical society, we form but a small part of that great body known by the name of Medical Fraternity. But, though small numerically, it is not said that we should be in any other respect. With the mind untrammeled and open to conviction, the heart susceptible to every high emotion, and responding to every noble impulse of a nature cultivated, refined, ennobled, elevated, why should we not, adopting for our motto "*Excelsior*," rise with the rising host higher and yet higher?—not forgetting those things which are behind, still press forward towards the mark of the prize of our high and holy calling, sanctified and dignified by our Lord himself.

But, in our day and generation, we find in medicine and surgery, as in all other branches of business, trade, or profession, there are two grand divisions: one, the untiring, unflinching, energetic, determinate man, with a principle which he loves and follows; the other is an easy, indifferent mediocre, who cares for nothing but the bread and butter of to-day; his motto is, "Let us eat, drink, and be merry, for to-morrow we die." Their advance is slowly, but surely, backwards, which of course very naturally causes them to turn up occasionally with those of bygone ages—perchance among the old French, Germans, Scandinavians—or possibly the old Greeks and Romans. They have heard of Hippocrates, and think him a kind of medical divinity; and that the men of his time possessed all the wisdom of the world. Celsus, Galen, and a catalogue of their time, are supposed to have been wiser than Virchow, Paget, and scores of the men of our own time, who have pushed science far beyond anything the ancients ever heard, or even dreamed of.

Imagine an old Egyptian dissecting and examining the various cells of the human body with a microscope of thirty thousand diameters. What greater contrast could there be with his real calling, *viz.*, that of embalming the human body intact, and

devoting all his time to the art of mummy-making? Such being their legitimate calling, how could they, or any of the ancients, know, according to their religion and laws, what anatomy meant? or physiology, or chemistry, as applied to medicine? Where did they ever exhibit any skill in operative surgery, or venesection even? What knew they of such agents as chloroform and chloric ether, or such operations as vaccination and cutaneous injection, simple as they are? And farther back in the ages, a man was declared unclean, and cast without the camp, for so much as touching a dead body. Of course, under such restrictions and laws, nothing was known of the real science of medicine. All was intrusted to the "*vis medicatrix naturæ*" to heal any and every sort of affection.

But, leaving the dim shadows of the far past, let us for a moment consider that which comes nearer home. The past year has been one of wholesome rivalry in most respects. New theories have been propounded, and old ones exploded. In addition to the rivalry which is at once healthful and invigorating, the genuine physician has had fierce opposition to combat and overcome in the legitimate practice of the healing art. The public mind has been, and still is, undergoing the process of education and reform—in doing which, the educators have had to run the gauntlet of interested and ignorant opponents, to contend with unscrupulous competitors, to break down the walls of prejudice, to silence the lying tongue; in brief, they have had to show themselves, as an Apostle said, "Examples of good works in all things: in doctrine showing uncorruptness, gravity, sincerity, sound speech that cannot be condemned; that they which are of the contrary part may be ashamed, having (if they had spoken truth) no evil thing to say."

As we have said, the motto of the true physician is "*Excelsior*"—higher, deeper, broader views of all that pertains to nature and nature's laws. This constitutes the whole catechism of the medical man; the first question of which is, What is anatomy? and the last of which shall be written, and the books closed, by the dazzling light that shall change the face of old Mother Earth like the refiner's fire, and make it

once more the Eden it was before the fall—which was the first great cause—least understood—creating the necessity, and continuing to the end of time, the office of physician.

This being true, great diligence is required, that we may grow in the knowledge of Anatomy, which numbers and places every bone, every muscle, every artery and vein, every duct, follicle, and tissue of the whole human frame. Physiology is necessary, in order to a correct understanding of the uses of all that constitutes anatomy in the human economy when in a state of health. Chemistry must be understood before we can know the constituent principles and component parts of the whole body, when fitly joined together by that which every joint supplieth. We must also thoroughly understand Pathology, general and special, which simply means nature disturbed, deranged, diseased, its principal divisions being Nosology, Etiology, Symptomatology, Therapeutics, which treat respectively of the classification, causation, symptoms, and cure of disease. Under this last head Surgery comes in as a part of Therapeutics, and relates in some way to the cure. Materia Medica also comes in here, under the general term Medicine, and is prophylactic, preserving the health, and therapeutic, restoring the health. If there be any other thing pertaining to man or medicine not included in the foregoing statement, it may be found in the motto of Maryland, "*Crescite et multiplicamini;*" and in that memorable line of Juvenal, "*E cœlo descendit gnothese auton.*" From Heaven the saying descended, "*Know thyself.*" This speaks volumes, when it is all told.

Regular medicine requires of him who would worthily be called *physician*, that he should possess a knowledge of all the foregoing branches; and a full knowledge of these implies also an acquaintance with ancient and modern languages, and a goodly amount of the history and literature which they include. Holding up and defending such a standard, it is not wonderful we should have opponents (in an age fast as this) to what requires so much labor. First of all, that class which opposes learning in general, are opposed to us. All those who propose to cure everything by water and steam. All who say

"*Similia similibus curantur.*" All those who reject minerals, and prefer vegetables exclusively. All those who make electricity master of all affections. Those who dispense with drugs altogether, only requiring faith in a few mysterious digital reports. Those who profess to cure private diseases with marvellous secret remedies. All these, and a catalogue we have not time to mention, if they be medical men at all, are but fragments of that glorious old system whose history began with Paradise lost, and shall grow in interest and brilliancy till Paradise be regained. True as the axiom, "The whole is greater than any of its parts," so true is regular medicine—greater and better than any of its parts, which it includes.

The tacit admission of these fragmentary theories accounts for the multitude of practitioners—so-called (though self-constituted) Doctors, and the comparatively few Physicians who have received their M.D. from State-constituted authority. Any one who has brass enough to appropriate that which does not belong to him, may enter this whole class of irregulars any time he pleases, under the existing laws of this State. But every one who would enter the field of regular medicine, and become acceptable members of our Association, must go through the years of patient toil and mental discipline which the State prescribes for those who honestly and justly receive the title of M.D., which means learned in medicine. This distinction between the two great classes aforementioned, and the Rules, or Code of Ethics, which govern them, is clearly understood among medical men, and the sovereign people of Illinois are more and more inclined to reflection on these things. Happy will they be, when everywhere such legislation as New England, New York, and other States have adopted, shall be inserted in her Code.

Legislation based upon the motto, "*Salus populi suprema lex esto,*" "The welfare of the people is the highest law." Regular physicians need no law for their own protection; for blood will show; and so will educated skill. It is only a matter of time anywhere; and the time is not far distant when the people everywhere will demand of physicians what they do of ministers

of the Gospel, *viz.*, *Education;* and by education we do not mean the simple pouring-in-and-out process between preceptor and pupil, but such a culture of the mind and heart as may enable us to think and act intelligently upon any proposition or subject that may be presented to us; whether from Europe, Asia, Africa, America, or the far-off Isles of the Sea; whether from the regions of eternal snow or eternal summer; whether civilized or savage, they all have their voice, which reveals the secret of their lives, and may subserve a useful purpose, if known to the medical man.

We are creatures subject to the bias of education. Moral philosophers tell us conscience is just what it is educated to be and perhaps that other saying is also true, "We are creatures of habit:" combining the two statements, we have what constitutes the man, *viz.*, his conscience and his habits; the former for the most part controlling the latter, though not always. As we may be greatly profited by travelling, and associating the history of the different nations together, we have been endowed with a constitution and nature fitted to endure almost all zones and climates; and the means for acquiring knowledge are greatly multiplied, by the Pen, the Press, the swift ships, the swifter cars, and swiftest wires; all which are the servants of man, under the Divine ordering, and are to develop the mind, expand the heart, ennoble the affections, and make man altogether a more symmetrical being.

But, among all these facilities and ways for acquiring knowledge, there is no royal road, any more than there is to Mathematics. Every one must dig for it himself. Whosoever undertakes any other plan, will be like the man addressed by the Principal of a Female Academy, telling him he had better take his daughter home, as "she was wanting capacity to go on." The fond father, not understanding his vernacular, replied, "Then I'll buy her one." Those who are wanting in application and brains, will have to try buying what they desire, or, if possible, effect an appropriation some other way. But this constitutes one phase of humanity, and is therefore worthy our study; for the Poet has said, "The proper study of mankind is man;" and the saying is pregnant with meaning.

"Know ye not," says the inspired writer, "that ye are the temple of God?" Ten years ago we read the following graphic comment upon these words, by a clergyman of New York:—"This temple is longer than the material universe, which it comprehends and shall outlast; ampler than the solid earth which, in the body, it circumnavigates with its sails, binds with its roads, ties with its wires, but which, in the spirit and its more powerful thought, it grasps as a very little thing, and shall finally fling from it, as a boy tosses aside his top; broader and more diversified in its faculties and attributes than the country of our pride, with more teeming territories of thought, deeper and stronger rivers of feeling, more widely contrasted climates of temperament and mood, more remote and diversified sections of interest and affection—the eternal house of God—the many-mansioned residence of his moral, intellectual, and spiritual essence." And if the round skull and orbed brain be what certain material philosophers make it, or have asserted it to be, the residence and representative of the soul—the visible temple of God—surely, the terraqueous globe itself contains no sandy Saharas or putrid seas, no deserts and wildernesses, no polar circles and miasmatic jungles, inaccessible to human feet, which compare in extent with the moral wastes and unoccupied regions of thought, and the tangled, trackless spaces in the vast convolutions of the brain, with its boundless tissues, as it is ordinarily used.

If phrenology be true, which I am far from affirming or believing, then the anatomist could detect with his knife all those portions of the human brain which had been used, and those, also, which had never come into the knowledge of its owner. Were it the style to submit every one to this test, when done with the brain, methinks these heavy advertisers, these blowhards, sounding their own trumpets, would be found occupying but a very small portion of this temple, and that away down in the *basement story—none* of that class ever mounting, step by step, to the topmost pinnacle of observation, study, and attainment in medical science. But, wherever found, they would, doubtless, have their old hobby-horse close by their side; no

prancing steeds, with distended nostrils and eyes all dancing with delight, to make quicker time than e'er before, at any gait, would anywhere be seen. These men are *usually* known as men of one idea, possessing but little, if any, power of combination. An astute canvasser for one of the largest insurance companies in the land expressed the same idea to me recently, and in good faith. "Medicine," said he, "is so well arranged now, that an ordinary man could learn all that is necessary in a year." I replied that I thought an ordinary man could only about learn his ignorance of medicine in a year, with *good instruction.* But thousands, acting upon the same belief of this agent, employ the veriest charlatans, and pay them the most exorbitant rates, contented to reap the most disastrous results; when, if the same pay had been given to the truly scientific, he might have come with healing and joy to the otherwise disconsolate and desolate hearts. Such a course, so extensively pursued, as it has been, by the people, discourages many a youthful aspirant to knowledge and fame from his intended ways, and, virtually, inclines him to the shortest cut to the practice, I will not say to the profession. Hence, the necessity for legislation. I do not mean class legislation, but the establishment of a standard to which all practitioners shall come who wish to be intrusted with human life. Such a standard, the older countries of the world have already established; and, as "Westward the star of empire takes its course," so, starting from the far East, legislation has crept along to Ohio, even, and soon, we presume, Illinois will take a stand in defence of her people against one of the worst impositions practised upon man.

To assume knowledge, rights, honors, privileges which we do not possess, and never intend nor expect to, is to have the unblushing impudence of a donkey and the chicanery of the veriest knave. This, of course, is done only where the people are credulous and unsophisticated in matters pertaining to medicine, and where there is no law to prevent imposition of the kind. Under such circumstances, if the people are swindled out of a few hundreds, or even thousands, of their hardly-

earned, rigidly-saved money, they have no redress. The fact that he was not a professor, as he said; that he was not an A.M., as he pretended; that he was not an M.D., as he affirmed; nor a Ph. D., as he asserted, all this cuts no figure in the case. Even if he is proven a scoundrel and a devil, in everything but the extent of his knowledge; if he never matriculated in any medical college, it is all of no avail; it was a bargain, and the subject of his deceit has simply been outwitted, circumvented, and fleeced.

We read, in Gibbon's History of the Decline and Fall of Rome, that it was an ancient custom that allies of the Republic who ascribed their safety or deliverance to the success of the Roman arms, and even the cities of Italy who admired the virtues of their victorious general, adorned the pomp of his triumph by their voluntary gifts of crowns of gold, which, after the ceremony, were consecrated in the temple of Jupiter, to remain a lasting monument of his glory to future ages. Would the Legislature of Illinois be as noble, or any member thereof frame and have enacted a law for the proper shield and defence of her people against all manner of medical ignorance and quackery, and attach thereto a penalty, which no one would wish to have repeated, for a violation thereof, then the sovereign people of the State could well afford to make a similar oblation, crowning such a legislator with more than a golden crown, *viz.:* with their gratitude and thanks, which should remain a monument of his glorious memory in all the ages and generations yet to come. The genuine, honest, laborious, self-sacrificing physician, who, by his knowledge, skill, persevering industry, and kindness, saves the life of his fellow, is entitled to as much honor as a Roman soldier for doing the same thing, though in a different way; and many are the people who know and feel this to be true, as an occasional tribute will show. Illustrative of this fact, we give the following quotation, selected by Prof. E. B. Stevens, Editor *Lancet and Observer*, from Dr. Reid, Editor *Western Christian Advocate:* "'Luke, the Beloved Physician.' Thus the Divine Word characterizes the only individual of this profession, of which it speaks. Next to the min-

ister, *often beyond the minister*, is the doctor a household favorite. If he has been with us amid much pain and peril, a deep and ineradicable gratitude is associated with his name and his benignant appearance. There have been times, perhaps, when, in our helplessness, we regarded him as the only arm strong enough to parry the blow that death was aiming at some object of our affections. We have watched the struggle with varying hopes and intense solicitude; but, when victory turned on the side of the doctor, we could have laid down our fortune at his feet, for the service he had rendered us. The doctor comes to our sick-room, day after day; he heeds the summons at night as cheerfully and promptly as if it were no pain to rise from bed and go out into the dark, damp, cold, cheerless streets, and into the chamber of suffering. No hour is his own. Neither sanctuary, lecture-room, parlor, study, nor dining-room, is free from the imperative call. The darker the night, the more howling the storm, the more likely some hypochondriac will be to fancy that he is just about to die, and the attendant must be summoned. Such is this profession; in it no rest is possible; pain, pestilence, dying, are its constant attendants. This profession is distinguished, too, for its extensive charities. As a body, physicians attend as cheerfully upon the poor as upon the rich. Where it is absolutely certain there can be no remuneration, still they are as constantly watching and prescribing. The tone of this profession is nobly above the sordidness of most other pursuits in life. It bases itself and buries itself in the humanity of its calling. It regards itself as set for the alleviation of human suffering, and the preservation of human life. The noblest manifestation of this is in the principle so universally accepted by the profession, that *there should be no secret medicines.*" The Professor adds: "Such is a part of the grateful and appreciative tribute which a noble minister of the Gospel has thought right to bestow on physicians; a tribute, we would fain hope, truthfully applicable to us, as a whole profession."

We had spoken of the medical man under the scriptural figure of a temple, which, according to its original signification,

was a very complete thing, and implied, first of all, the perfection of the architect, as exhibited in its plan, development, and completion; and, also, how cunning must be the artisan, to execute his every order in preparing each part, so that, when all were placed together, they should have more the appearance of the divine than the human handiwork. So, as artisans, we are to study the plan of this divinely-constructed temple from top to bottom, from centre to circumference; learn all its cells, its numerous passage-ways, its rooms and lights, its doors, with all their hinges and joints, of what material they are each composed, what telegraphic signals are given when they are injured, what instruments and material are necessary in the repair, and how used, what changes may be required of air, position, or place. All this requires not only a knowledge of the temple itself, but also of its surroundings. 1st. Is the air salubrious, the scenery attractive and beautiful; or is it the reverse? Does the patient need the mountain air, with its excess of oxygen, or the sea-breezes, with an excess of hydrogen? Does he need steady heat, or constant cold? What peculiar customs and institutions would bring about a favorable reaction. A knowledge, if you please, of the porches, verandas, observatories, its circumambient walks, its shrubbery, flower-garden, fruit-yard, and all that adorns and utilizes the whole.

But we must not further proceed in enumerating the requirements of the medical man, lest we might seem tedious in the long detail. We have only to say, let business press as it may, the physician must keep up his stock. Nothing, but the imperative calls of his country, should ever turn him aside from the duties which belong to the profession of his choice. The old Latin adage should ever be placed before him in letters of living light, "*Retrorsum non gradum*," "No steps backwards," but, in the language of that brilliant general, whose victories flash like meteors across the land, "*On to the sea!*" On to the sea of perfection in attainments that minister health to the sick, joy to the sorrowing, and life to the dying.

A word, with regard to the object, workings, etc., of the Montgomery County Medical Society, and we are done.

In common with all beneficent associations, we meet for the purpose of mutual recognition and fellowship; our object being to promote the interest, honor, and usefulness of the profession, by the cultivation of medical science and literature, and the elevation of the standard of professional education. Our order of exercises consists, mainly, in the reading of papers, the reports of standing and special committees, the discussion of questions specially selected for that purpose, and the relation of cases that have fallen under the eye of some members of the fraternity, and are by them considered of special interest to the Society. Occasionally, a case of great interest comes before the body in person, which furnishes fresh occasion for fresh investigation and remark. It ought, also, to extend its jurisdiction to the domain of drugs, to insist upon competent persons handling and dispensing them, and insist, also, that none but pure drugs be exposed for sale in the market. With the striking revelations that have been made, relative to the impurity of drugs, in New York and Cincinnati, this suggestion seems imperatively essential to the success of every practitioner of medicine and surgery. True, such vigilance and circumspection, in addition to our present labors in the practice, require almost Herculean strength and activity; but this we must do, if we would attain that degree of excellence we so much admire in others of our own and different professions; for,

"The lives of all great men remind us
We can make our lives sublime,
And, departing, leave behind us
Footprints on the sands of Time.

"Footprints that perhaps another,
Sailing o'er life's stormy main,
A forlorn and shipwrecked brother,
Seeing, shall take heart again.

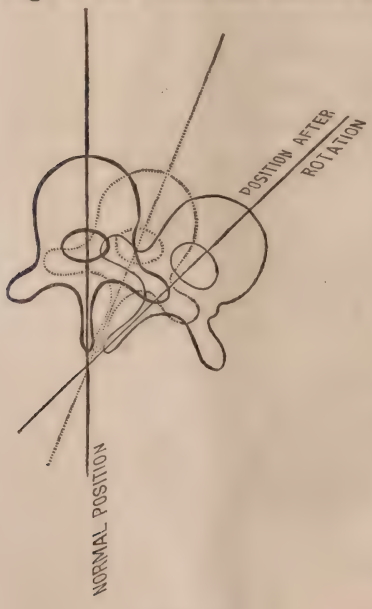
"Let us, then, be up and doing,
With a heart for any fate;
Still achieving, still pursuing,
Learn to labor and to wait."

ARTICLE VII.

LATERAL CURVATURE OF THE SPINE.

BY J. S. SHERMAN, M.D., Lecturer on Orthopædic Surgery, in Chicago Medical College.

Within the last twenty years, the advance of general surgery has been very rapid; yet, until within the last ten, the subject of deformities has been greatly neglected, and the descriptions of them by surgical writers, considered as authority, are exceedinglyd eficient. From the infrequency of *post-mortem* examinations, the study of spinal curvature has not been generally pursued, and we find many modes of treatment advised, which certainly are not based on the pathological conditions present; and, consequently, the various theories advanced, as to the cause, progress, and treatment of these diseases, are diametrically opposed; facts being taken for granted, without accurate knowledge of the conditions under which these curves must occur.



(Fig. 1.)

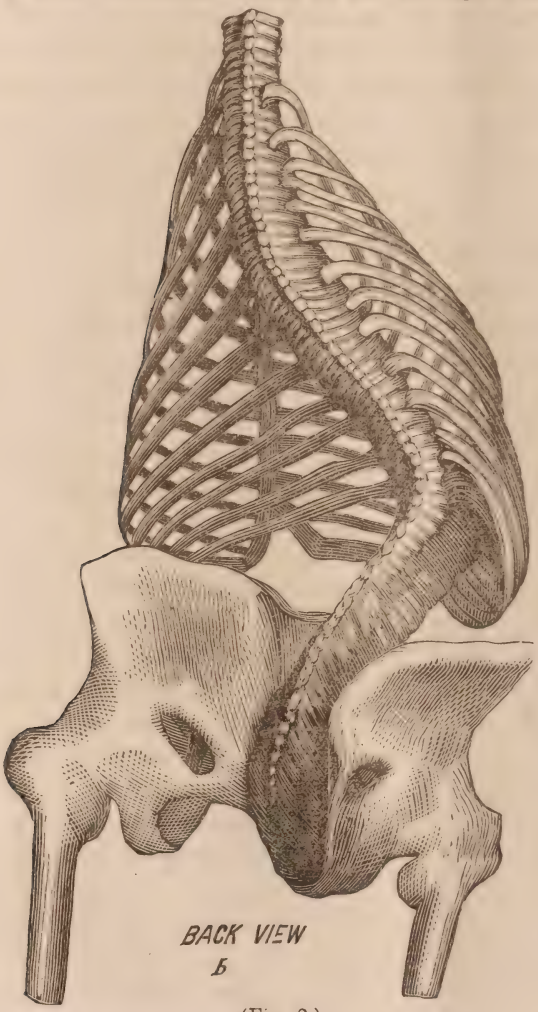
The largest number of cases, and most accurate descriptions of *post-mortem* appearances, have been reported by Mr. Adams. His investigations have undoubtedly proven facts heretofore not considered, and I have never seen better results than under his reattment, in the Royal Orthopædic Hospital of London.

The lateral curvature of the spine, as shown by tracing the spinous processes, is usually taken as an index of the curvature. No greater error can occur. A decided internal curvature, involving the bodies of the vertebræ, may exist, with but slight, if any, deviation of the spinous processes.

These curves are all compound, and rotation of the vertebræ on a horizontal plane is a constant factor of all.

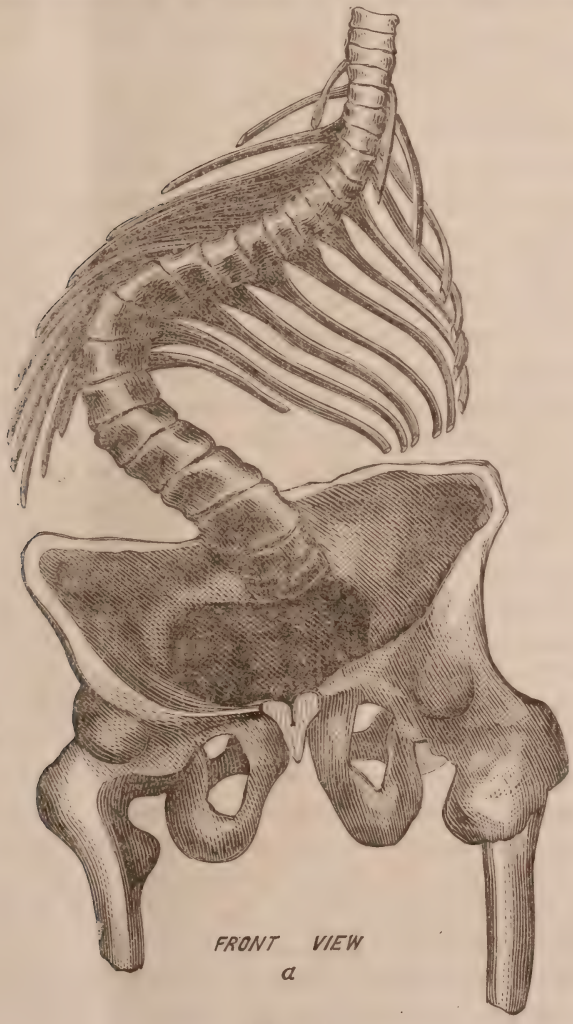
The position which they assume, as rotation advances, is shown in Fig. 1, from Adams' Lectures on Spinal Curvatures. The spinous processes remain almost stationary, while the bodies revolve round them, as a centre.

Figs. 2 and 3 are from a case in the Chicago Medical Col-



(Fig. 2.)

lege. (*b*) represents the back view, and shows the curve formed by the spinous processes; (*a*), the front view of the same, formed by the bodies. This is a most aggravated case; yet, the preponderance, to a great degree, of the internal curve over the external is plainly visible, and shows the error of estimating the position of the column by the position of these pro-



(Fig. 3.)

cesses. Serious cases of lateral curvature are often dismissed by the surgeon as of little consequence, because he detects so slight a deviation of the spinous processes from their normal line. These very cases have often reached a degree of internal curvature that produces compression of the viscera, and is slowly changing the form of the bones, to an extent that when external curvature is decided the perfect cure becomes impossible. We must, therefore, look elsewhere than to the spinous processes for early diagnosis.

The investigations of Mr. Adams have thoroughly proven that rotation of the vertebræ is the first step in the abnormal process, and that this rotation is at the expense of the articulating processes, which, in their natural form and position, prevent this movement. Certain symptoms, nevertheless, do indicate curvature in its early stage; and these are: prominence of the scapula and elevation of the shoulder, due to rotary movement, which carries backward the angles of the ribs, on the convex side; and, when the curve is double, a prominence of the hip is seen, produced by the retraction of the abdominal muscles into the concavity of the lumbar curve; also, on the anterior surface of the body, a projection of the breast, on the opposite side from the convexity of the dorsal curve, with change of position of the sternum from the perpendicular.

Pain is sometimes present, yet often absent. When it does occur, it is of a diffuse character, and referred to the spine and spinal muscles; differing from the pain in the early development of Potts' disease, which is remote from the spine.

As the twisting of the column advances, the spinal cord also, from being attached to the inner surface of the foramen, partakes of the same change, which compresses its fibres and causes disturbance of its functions. The general health is often impaired, yet frequently in the early stage it is not interfered with. I have met this disease as often in the strong and robust as in the feeble and weak; but most cases of advanced curvature suffer *some* impairment of health.

When lateral deviation of the spinous processes is seen, it is at the expense of the *cartilages* and *bones;* the latter are only altered in shape in cases of long standing.

When we consider that the sum of the thickness of all the intervertebral cartilages is equal to one-fifth or one-fourth of the height of the spinal column, and that pressure, in the upright position, for twelve hours, diminishes the height of the individual from three-quarters to one inch, by simple compression of these bodies, it is not difficult to account for lateral curvature being produced by continued uneven pressure upon the same. When the extreme point of compression is reached in this tissue, the bones begin to yield; and Fig. 3 shows, also, the wedge shape of both bones and cartilage.

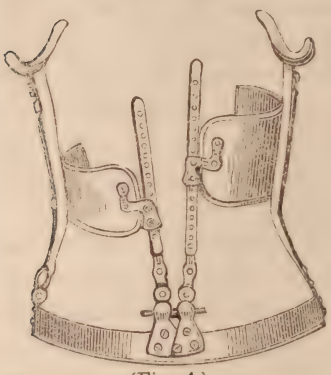
The early recognition of curvatures becomes more important, when we consider that their correction and cure in the early stages is easily accomplished; while in the old and confirmed, the deformity yields exceedingly slow.

The formation of some is laid in infancy; the vertebræ are not completely consolidated until near the thirtieth year, and deficiency of development or irregularity in form are often not noticed in early life, but show their effects when the normal, dorsal, and lumbar curves begin to develop, generally between the ages of eight and seventeen. This class are among the most difficult to correct. The statement, made by some authors, that patients suffering from lateral curvature generally die of tuberculosis, is not proven by statistics; and in my own experience, the tubercular diathesis has been the exception, and I believe the curvature to be produced entirely without such constitutional conditions.

The disease is often hereditary; all the members of the family suffering from this deformity. The direct and immediate cause of the disease is a too constantly maintained position, that causes the spine to remain bent from its perpendicular until changes occur in the intervertebral cartilages, bodies of the vertebræ, and articulating processes. With these conditions present, it is evident that the treatment cannot be of a simple character. Simple exercise of muscles will not correct changes which have occurred in the bones and cartilages; nor will pressure alone, on the convexities of the curves, remove the

rotation. A combination of lateral and rotary movement is absolutely necessary.

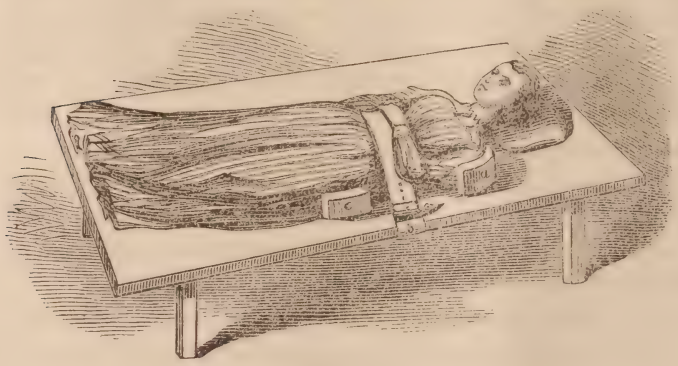
For the purpose of making lateral pressure in the *upright* position, I use the ratchet and pivot instrument, figured in No. 4. The lateral pressure is made by means of the steel plates attached to the upright rods at the back, and the force is regulated by turning the ratchets below.



(Fig. 4.)

This instrument has been modified by various orthopædic surgeons, and Mr. Adams combines a rotary movement of the side-plates. I have preferred to make this movement with the patient in a horizontal position, as the weight of the body is then removed and rotation more easily accomplished.

Fig. 5 represents the patient on the spinal couch: (*a*) being a strong pad, curved to fit the shoulder, and (*c*) a similar one,



(Fig. 5.)

adjusted to the hip; (*b*) is a strong *elastic* band, passing round the body. The under portion of this band is attached to a buckle on the side. Its tendency, when tightened, is to compress and, at the same time, twist, or rotate, the ribs in an

opposite direction, on the same principle that a band revolves the wheel over which it passes. This is more effectual than any apparatus applied when the patient is standing. Strong lateral force is produced at the same time.

Continuous use of these means is necessary for the correction of spinal deformities. There is no rapid mode of correcting them; weeks and months are necessary. By using the supporter and the lounge, the patient is able to get all the exercise necessary for health; and, in severe cases, the lounge should be used at least six or eight hours out of the twenty-four.

81 Monroe Street.

ARTICLE VIII.

A PROPOSITION:—RELATING TO THE MODIFICATION AND PREVENTION OF CERTAIN ZYMOTIC DISEASES.

By THEODORE GRIFFIN, M D., 789 State Street, Chicago.

Those diseases which, after once being developed in the human system, thereby destroy the susceptibility of the system to a second like invasion, may be prevented, or their severity greatly modified, by the introduction into the human system of a like virus, transferred from the lower orders of the animal creation.

The diseases which may thus be modified or prevented, belong to the class known as "Zymotic;" and are small-pox, scarlatina, measles, etc.; including the whole catalogue of diseases alluded to in my proposition.

The modification and prevention of—once the greatest scourge of mankind—small-pox, by the introduction into the human system of a similar virus, taken usually from the cow, leads fairly to the inference set forth in the foregoing proposition. It has been observed that the cat, horse, and many of the lower animals, are subject to eruptive and other diseases; but I am not aware that careful inquiry has been made into the pathology of these morbid conditions, which, it may be found,

have their prototype in the human system. The disease observed in cows, called cow-pox, is identical with small-pox, and affects alike cows, horses, and monkeys; and human small-pox may be communicated to these animals by the impalpable emanations (the specific effluvia) through the medium of the atmosphere.

May we not discover other of the diseases alluded to, among the lower animals? And if so, may we not hope to obtain results similar to those which follow the introduction of the cow-pox virus into the human system—namely, *exemption from these diseases?* The subject deserves investigation. If we are not able to detect, for example, scarlatina in the cat or dog, we may readily test his susceptibility to the disease by inoculation with the specific poison. Should disease develop itself as a result, we may fairly conclude that we have scarlatina: now we may transfer the virus to the human system, and await the result; which result we may expect to be a modified form of the disease, with complete exemption from a future attack.

Let us thus open an avenue through which we may thrust those scourges of our race out of the world, as the immortal Jenner virtually thrust out small-pox, but failed to see the general application of the principle upon which it was accomplished.

ARTICLE IX.

A CASE OF FATTY TUMOR.

By GENEROUS L. HENDERSON, M.D., Kokomo, Indiana.

Mrs. Rayles, æt. 65; small in stature, of a nervous temperament.

About 26 years ago, she first noticed a small tumor, the size of a hazelnut, under the right arm, below the axilla, and a little to the anterior.

It gradually grew in size, but without any serious pain, until within the past year, when it began to enlarge very rapidly, and ulcerated, with sharp, shooting pains.

It was now that it began to undermine her health, and that she was willing to undergo a surgical operation.

Gave her *tonics and support* freely, for a fortnight before the operation; also an anodyne occasionally, to allay the pain and to procure sleep.

On the 29th of October, we (Cole and Henderson) called, and found the tumor of an oval shape, somewhat flattened, and tolerably well defined; it had a soft, doughy feel.

Being assisted by Dr. Shoultz, we determined to operate. First chloroforming her in a supine position, we operated by rapidly making an *elliptical* incision, and carefully dissecting out all of the tumor, which was readily done, without much hemorrhage: the wound was brought together with *pins*, adhesive plaster, etc. (in fact, we do not use any other *suture*, because it does not absorb moisture, nor produce the irritation that a thread would; and, besides, it holds the parts more firmly in coaptation).

The extirpated tumor is seven (7) by eight (8) inches in diameter, and weighs 2 lbs. 2½ oz.

The wound did not have a tendency to very rapidly heal; but, by gently stimulating it a little with *carbolic acid*, and giving a good and generous diet, with tonics, it kindly healed, with but little suppuration.

She is now well and about her household duties, and enjoying a better state of health than she has for years before the operation.

ARTICLE X.

EXTRAORDINARY CASE OF RETENTION OF URINE.

By J. H. CURTIS, M.D., Kansas City, Mo.

Kate H., 14 years of age, lives near Wyandott, Kansas; brought to the office September 3, 1868; has pale, sallow complexion; tongue pale, flabby, and heavily coated; pulse regular, and not too rapid; abdomen but very little enlarged, and without tympanitis, and without tenderness or pain. But com-

plains of some pain, with a curious feeling in head; has never menstruated; bowels regular, but without any desire to micturate. There is a very considerable increase of size about the pelvic region, with a spreading of the hips like a woman in the last stage of pregnancy, but without any evidence of dropsical effusion either in the cavities or cellular tissue. Declares positively she has not voided a drop of urine for four weeks and four days; her statement is corroborated by her mother, who has been with her constantly, watching her closely when she would go out to stool, and asserts it has been absolutely impossible for her to have passed any urine without her knowing it; and for 32 days not one drop of water has passed from her as urine. Has been under treatment a number of weeks from three or four doctors in their neighborhood, but without any benefit; catheterism having been tried twice without any result.

I gave her immediately fl. ex. hydrangea, ℥iss., to be repeated every three hours, and to be followed in 1½ hour with a powder of calomel, grs. xx., to be repeated at the same intervals after each dose of the hydrangea, until the bowels should be well moved. In 14 hours after she had taken five doses of the fl. ex. and four powders, and before the bowels had moved, after suffering the most intense pain for an hour previous, she passed 3½ quarts of very clear, colorless urine; the bowels were well moved in an hour or two afterwards, and in six hours she again voided 4 quarts more of the pellucid-looking water, by which she was entirely relieved. In two weeks complete convalescence was established, by the use of pil. hydrarg. every third night, and the use of nit. potass. and soda bicarb. solution every three hours during the daytime.

Having never heard or read of such an extreme case of retained urine, I have thought it worth reporting; and the result of the treatment, so prompt and satisfactory, may benefit some of my medical brethren, if called to meet a similar case. The mother and daughter are both willing to make affidavit to the above statement.

The Clinique.

CLINICAL REPORT FROM MEDICAL WARDS OF MERCY HOSPITAL.

By N. S. DAVIS, M.D., Professor of Practical and Clinical Medicine, in Chicago Medical College.

Reported by W. A. Barstow.

Gentlemen:—I shall occupy your attention during the clinic hour with a case of cardiac disease. Upon auscultation, we have no difficulty in locating the disease in the heart; but when we go back of that, and try to ascertain what particular valves are involved, it is not so easy.

You will observe the patient is in a sitting posture, which seems to be his most comfortable position.

The flush on the face and hands is not due to fever, as there is no perceptible increase of heat of the surface; but it is due to capillary congestion, which is sometimes of a purplish hue. If the patient were to go down-stairs and return, or take any active exercise, the flush would become decidedly more venous, as well as the respiration more labored and oppressed. There will be noticed above the clavicles slight pulsation in the jugulars, which is also much increased on exercise.

You could not, under any circumstances, have a patient in a more favorable condition to distinguish the exact condition of the heart's action, as he has been taking arterial sedatives for several days, and is now sufficiently under the influence of the medicine to render the sounds very distinct. A little below and to the left of the nipple, upon the application of the stethoscope, you will get a double murmur: one harsh, rasping, and loud, the other softer and shorter. The first is synchronous with the systole, and the second with the diastole. The first is heard over the whole cardiac space, the second only over the left side. This shows that the principal difficulty is in the auriculo-ventricular opening of the left side—the location of the mitral valves.

You hear the rasping sound all about the region of the heart; but move which way you will, when you return a little to the left and below the nipple, you hear it the loudest. The second sound you hear is due to slight regurgitation. Over the rest of the heart you get only one sound, occupying the entire time of both sounds of the heart. The hypertrophy in this case is well marked. When the patient was not under the effects of medicine, there was regurgitation on the right side, giving a strong pulsation in the epigastric region through the ascending vena cava, and also the descending vena cava to the jugulars.

When I first examined the patient, there seemed to be a well-marked aneurismal tumor in the epigastric region, which was quite tender to the touch. This tumor was present two days ago, when I called the attention of the other division of the class to it, but I see it is absent to-day.

This man's heart is probably in the same condition as that of the man who died several weeks since, and whose heart I exhibited to you—*viz.:* a dilatation of the right ventricle; contraction of the mitral opening, with thick, roughened edges, and preventing a complete closure during the systole of the ventricles; and general hypertrophy of the muscular structure.

When the patient is disturbed, the tricuspid valve is insufficient to close the auriculo-ventricular opening of the right side, because it is enlarged by the dilatation of the right ventricle. The apparent pulsating tumor in the right side of the epigastrium was probably caused by overfulness of the vena portæ, from regurgitation through the auriculo-ventricular opening of the right side into the ascending vena cava.

If you notice the feet and ankles, they will be found quite œdematous; a condition which is present in most cases of cardiac disease in the advanced stages. If the pathological conditions of the patient have been described correctly, the prognosis is unfavorable; and to render the action of the heart slower and more uniform, constitute the principal objects of treatment. Just in proportion as they can be accomplished, will the patient be rendered more comfortable, and his life be

prolonged. By rendering the action of the heart slower and more uniform, more time will be allowed after each systole for the blood to pass through the narrowed mitral opening from the left auricle; and hence the pulmonary circulation will be less obstructed, and the equilibrium between the fulness of the right and left cavities of the heart be better maintained.

To fulfil the indications just stated, the patient is taking one fluid drachm of the following prescription before each meal and at bedtime:—

℞. Fluid Ext. Scutellaria,---------- ʒiij.
" " Digitalis, ---------- ʒj.

Mix.

Also, five grains of Sub. Nit. Bismuth, half an hour after each meal.

When the patient commenced the use of the scutellaria and digitalis, four days since, his pulse was 110 per minute, and irregular, with dyspnœa, epigastric distress, cool and purplish-colored extremities, and strong pulsation in the jugular and subclavian veins.

Now his pulse is only 60 per minute, and regular, with a decided improvement in all his symptoms. His diet has been plain and nutritious. The same treatment will be continued, with careful attention, to prevent any excess in the action of the digitalis.

Proceedings of Societies.

CHICAGO MEDICAL SOCIETY.

FRIDAY EVENING, DEC. 18, 1868.

The meeting was called to order, Dr. Marguerat, President, in the chair.

Dr. Macdonald being absent, Dr. Gray was appointed Secretary, *pro tem.*

Dr. Holmes referred to a case under his care, of Gray's disease of the eyes—where they actually protruded from their sockets; owing to general relaxation of the recti muscles.

Dr. Marguerat asked what would be the prognosis in such a case?

Dr. H. replied, not favorable, as the man's father, sister, and brother were affected in the same way; the latter having lost one eye. The Doctor also spoke of the case of the young man whose lens dropped into the anterior chamber of the eye while stooping over, and which was reported at a previous meeting. He says that the patient returned home, and, six weeks after the operation, sat down in the evening and wrote a letter with remarkable ease and comfort, but the next morning found himself perfectly blind, owing to detachment of the retina. Dr. H. further remarked, that it was not uncommon for persons in good health to become blind from this cause.

Dr. Merriman asked if there was a way to correct this accident?

Dr. H. says not, if it is extensively detached.

The President then requested Dr. Bridge to open the discussion of the subject chosen at a previous meeting, *viz.:* "Would it be conducive to morality to adopt measures to prevent the spread of venereal disease"?

Dr. Bridge was of the opinion that any disease was injurious to morality, and thinks any measures adopted to prevent disease would improve morality; but is of the opinion any measures adopted to diminish the spread of venereal disease would increase prostitution; and thinks that many thousands now have nothing to do with prostitution, who would, were it not for fear of venereal disease. Read an extract from Dr. Andrews' investigations in Europe, who says there are 24 per cent. more prostitutes in cities where the license system is introduced.

Dr. Gray considered prostitutes a necessary evil, and did not see any better method than to license them, and when they become diseased send them to a free hospital for treatment. Says that in Paris there is *one* prostitute to 280, and in Chicago *one* to 230 of the inhabitants, and that 16 per cent. of all cases of disease in Chicago are venereal, and $16\frac{1}{2}$ per cent. in Paris.

Dr. Wickersham considers this a very serious subject, and says that he has thought a great deal about it, as he has been

called upon to treat a great many cases—as young men seek young physicians. Cited a case where $200 were offered a young lady on the Avenue, by a man who was afraid to go to a house of prostitution, for fear of *disease*, or being *pulled by the Police*. Hence making advances to virtuous girls. Thinks prostitution an unavoidable evil, and therefore favors the license system, believing it would be a protection to the virtuous, as well as prevent the spread of venereal disease. Says, were venereal disease only to affect the persons themselves, it would not matter so much; but it passes to the children, constituting congenital syphilis. Thinks the license system would also lessen this form of the disease.

Dr. Paoli is of the opinion that we can prevent this evil to a great extent by showing more Christianity, and through the influence of the churches, by preaching sermons appropriate for the prevention of evils in our society. Thinks if we had licensed houses, with careful examinations twice a week, that it would be productive of morality; also recommends that syphilitic as well as temperance apostles travel around the country, lecturing, as it would cause people to reflect, and consider the consequences of this disease and prostitution.

Dr. Merriman remarked, that, judging from statistics in this as well as other cities, he had become convinced that fear prevents the contraction of venereal disease only to a very limited extent. Thinks medical students not so much afraid of it as law students, although they have the opportunity of seeing it in the hospitals; but still they get it. If they do not go to houses of ill-fame, there will be more private women kept; hence believes, on the whole, it would be better to license them, and a certain portion of the city assigned to them; and, when diseased, that they be sent to hospital. By carrying out this system, he thinks that many men would be ashamed to go to that district, as people generally would judge that they went there for a special purpose. Consequently, thinks morality would be improved, and the spread of venereal disease diminished, by legalizing prostitution.

Dr. W. E. Clarke is of the opinion that if you make prosti-

tution a crime, and punish it as such, that it will be productive of morality; but thinks there is no argument that can convince him that the licensing of houses of prostitution would produce such results.

Dr. Wickersham remarked, that those women living around in "Blocks" are the most dangerous and poisonous; as men have an opportunity of slipping up to their rooms unobserved. The Doctor favored the legalizing of regular institutions, and the arrest of every one who keeps a room; also, the arrest of every man who is found going to these *private* places. He says no man can go about this city but what will become convinced that prostitution is becoming alarmingly increased. He also mentioned the way our city ladies are brought up and educated, as being detrimental to morality, by being only fit to dress in silks and live on the Avenue. Says that young men living on a salary cannot afford to marry and support the style the young ladies have been accustomed to, but they can live singly and go in good society; hence, they refrain from marrying, knowing that the extravagance of their wives would inevitably reduce them to poverty.

Dr. Fisher says, that the less there is said about this subject the better; and that he does not know what we can do to prevent it. Thinks if all knew the effects of constitutional syphilis, that it would prove beneficial. Does not recommend the license system; but says we should do what we can to prevent it.

The Society then proceeded to miscellaneous business.

Dr. Bridge recommended, as the subject for the next discussion, "The Therapeutical Uses and Action of Mercury and its Salts," which was duly carried. Drs. Clarke, Merriman, and Loverin were appointed to open the discussion.

Dr. Hildreth stated that he was called at 5 P. M., one day last week, to see a young lady who had been poisoned by the escape of gas from a gas-stove in a bath-room. When the Doctor arrived, he found her unconscious, and respiration very slight. Immediately commenced artificial respiration, by compressing the ribs laterally; kept it up for ten minutes, when

pretty good respiration was produced. The action of the heart was still feeble. Then gave the patient about a pint of strong hot coffee. In fifteen minutes, the circulation was good. The patient states that when she entered the bath-room she felt nauseated, which was the last she remembered.

The Doctor cited a similar case of poisoning by carbonic acid gas, as having occurred on shipboard; when he administered carbonate of ammonia and brandy without very beneficial results, but resorted to the coffee with entire satisfaction.

Society adjourned.

CARROLL COUNTY MEDICAL SOCIETY.

Pursuant to a call, circulated among the physicians belonging to the regular profession of medicine and surgery, in Carroll County, a meeting was held in the First Baptist Church, in Lanark, on Tuesday, December 8th, 1868, for the purpose of organizing a County Medical Society, for a more thorough protection, both in and out of the profession, against the evils of medical empiricism; and to afford mutual assistance in the amelioration of the sufferings of humanity.

Dr. J. L. Hostetter was chosen temporary Chairman of the meeting. The Constitution, By-Laws, and Rules of Order were then read, and, on motion, adopted as the basis for the government of the Society. The officers for the coming year were then elected, as follows:—

President, Dr. John L. Hostetter, of Mount Carroll; Vice-President, Dr. J. B. Porter, of Lanark; Secretary and Treasurer, Dr. J. Haller, of Lanark.

The following-named members were, by resolution, requested to read papers at the next meeting of the Society, to wit:—On the Action of Chloroform as an Anæsthetic Agent, Dr. N. Stephenson, of Thomson. On the Action of Veratrum Viride sa an Arterial and Nervous Sedative, and to what Extent in Dose it may be safely administered, Dr. D. M. Greeley, of Mount Carroll. On Fractures in General, both Compound and Simple, Dr. B. P. Miller, of Mount Carroll. On the Action of

Gelseminum Sempervirens, Dr. J. Haller, of Lanark. On the History, Rise, and Progress of Medicine, Dr. J. B. Porter, of Lanark. On Medical Ethics in General, Dr. J. L. Hostetter, of Mount Carroll.

On motion, it was resolved that any member of the press and clergymen, who are favorable to the "Regular System of Medicine," be allowed seats at the meetings of this Society.

On motion, it was ordered that the Secretary make out and forward a report of this meeting to the CHICAGO MEDICAL EXAMINER and *Chicago Medical Journal*, for publication.

There was a good attendance of the physicians of the county, and a most cordial feeling prevailed. After an interchange of views on different topics of medicine, the Society adjourned, to meet in Lanark, on Monday, Feb. 22, 1869, at 2 o'clock P.M.

J. HALLER, M.D., *Sec'y.*

Selections.

REMARKS AND OBSERVATIONS ON SACCHARINE DIABETES, WITH THE TREATMENT OF TWO CASES.

Read before the Nashville Medical Society, BY J. E. MANLOVE, M.D.

[Published by request.]

MR. PRESIDENT:—At our April meeting, the Society, at the suggestion of the author of this paper, selected for the consideration and discussion of the present meeting, the subject Diabetes; and, in obedience to the inexorable parliamentary law, I was appointed to open the discussion.

Prefatory to approaching this intricate and difficult subject, presenting as it does a vast field for physiological and pathological research and inquiry, allow me to say, that but two motives prompted me, in suggesting to the consideration of the Society:—1st. The highly satisfactory and encouraging results of the treatment of two cases, which have recently fallen under my observation; and, 2dly. The hope that some new light may be elicited and diffused, to the honor of our profession, and the mitigation and relief of human suffering. The treatment of the

two cases referred to, though not entirely new, has certainly not been adopted or sufficiently insisted upon by the profession, in this country. Whether this has grown out of a misapprehension of its pathology, the infrequency of its occurrence, or the known intractable character of the disease, I know not; but certain I am, that the treatment hitherto has, to a great extent, been empirical, and productive of very little, if any, good and lasting results.

Before detailing the cases, with their treatment, the Society will indulge me in some preliminary remarks collaterally connected with this subject, and which are considered necessary to a full understanding and elucidation of it; together with the expression of my own poor opinion, and inferences deduced from the pathology of the disease.

The term Diabetes is derived from a Greek verb, which means to pass off, or through. Hence, by some, it has been called a urinary Diarrhœa; Diarrhœa urinosa, dipsas, diuresis, hydrops ad matulane, profluria urinæ, etc.; each name intending to imply an excessive discharge of crude urine, exceeding the quantity of fluid drank by the patient. Bœrhaave, in his Institutes, says: It is a frequent, copious discharge of lacteous urine, in conjunction with an extraordinary tenuity of the fluids.

Dr. Cullen places this genus of disease in the class neurosis, and order spasmi: which he defines a chronic flow of urine, in immoderate quantities, and of a preternatural quality. He notices two species:—1st. Diabetes Melletus, when the urine has the color, odor, and taste of honey. 2d. Diabetes Insipidus, when the urine is limpid only. Home defines it to be an extraordinary increase of urine, and that of a sweetish taste, attended with perpetual thirst and a dry skin.

The bare mention of the names of the above-mentioned authorities suggests the antiquity of the disease in question, and shows that the earlier cultivators of our profession, so far at least as its identity is concerned, were not without a full knowledge of its existence.

The application of the term Diabetes, however, to *all* chronic and excessive discharges of urine, I regard as most unfortunate; inasmuch as it has led, in many instances, no doubt, to malpractice—such discharges being treated as Diabetes by *name*, regardless of the *quality* of the urine voided, or of the *causes* producing it. The treatment, in the one case, if not productive of positive injury, can certainly produce no good results.

Passing, without special notice, the other, or all other varieties of this affection, I propose to confine myself to that form

of the disease known and recognized as Diabetes Mellitus; or, more properly, perhaps, Saccharine Diabetes, that form in which sugar, in greater or less quantities, is known to exist in the urine. Before proceeding further, did it not seem presumptuous in me, and as casting an imputation upon the intelligence of this Society, I might here pause, and invite your attention to the heterogeneous and compound characters of the urine, even in its most healthy condition.

An examination of healthy urine, deposited in a vessel, reveals to the eye no striking peculiarities; straw or amber colored fluid, specific gravity from 1010 to 1015, with rather a peculiar smell, is all that distinguishes it from any other fluid of a specific gravity from 1010 to 1015; to the senses it seems to be homogeneous. The most credulous could scarcely believe that some 14 or 15 substances or ingredients enter into its composition; several of which are chemically incompatible, yet so mixed and blended with each other, and in such harmonious proportions, as to constitute apparently one homogeneous whole. Sugar, however, is not one of the ingredients or elements of healthy urine. Though it is an element perhaps always present in the healthy animal economy, its appearance in the urine may be regarded as a messenger of evil omen, the harbinger of fearful portent; an enemy has insidiously crept into the citadel. The kidneys, those sleepless sentinels upon the watch-tower, that never know repose, have seized upon, and are endeavoring to eject him—eliminate him, if you please—as they do all other debris and effete matter, the retention of which would be destructive to health and life.

This disease, if such it can be called, from time immemorial has been regarded as among the *opprobria medicorum;* and, I believe, is one of the uncoveted legacies bequeathed to man only; no inferior animal, so far as I know or believe, ever being the subject of Saccharine Diabetes.

The justly celebrated Dr. Prout, to whose labors we are indebted for the existence of urinary pathology as a science, remarks: that animals are not subject to Saccharine Diabetes; and very pertinently asks, Can the exception be referred to that fertile cause of bodily disorder, *the influence of the mind?* M. Claude Bernard, the distinguished French physiologist and pathologist, mentions this fact, and almost laments it; as the physiologist, in consequence, has no means of vivisection.

Dr. Watson, the distinguished author of a Practice of Medicine, with which we are all familiar, says he had a coach-horse, that he supposed might have Diabetes: he was a great eater, and

drank eagerly, but grew thinner and thinner. Dr. Prout, he says, was kind enough to examine his urine. It contained no sugar. In this connection, allow me to state that an eminent physician of this city informed me that he lost a fine milch cow of Diabetes; discharging large quantities of urine, from the effects of which she died. He thought it probable that it was saccharine—the weight of testimony, however, preponderates against this conclusion.

If, then, as has been conclusively shown, of all created animals, man only is the subject of this malady, as well as of other analogous affections—hysteria, for instance, which may be regarded as the analogue of Saccharine Diabetes, and of which the inferior animals are never the subjects—how are we to account for their origin, except in the more highly elaborated and exalted innervation? A brain and nerve development of such exquisite, delicate structure, that while they supply the physical machinery of our bodies with all the facilities and capabilities necessary to put us in a proper, pleasant, and useful relation with the world around us, they at the same time furnish a matrix, a home for the intellect, a temporary resting-place for the immortal mind—the Soul, if you please—which grows and expands, *parri passu*, with the developments of our bodies.

I pretend to no knowledge of that subtle and mysterious connection which exists between mind and matter. Such a disquisition would be regarded as metaphysical, and foreign to the subject before us. But because we do not *understand* it, it is no proof that such connection does not exist. Do we understand how vitality, *Life*, is connected with our physical bodies? We do know many of the causes that work its destruction; but of that close, intimate connection, the whys and wherefores of which we are ignorant; and, from the very nature of the subject, it is humiliating to believe we must ever remain so. That such connection does, however, exist, we have positive proof, we are not left to conjecture; and, it is equally certain that the dependence, one upon the other, is mutual—*sana mens in sano corpore* is a trite adge; as true, however, as it is trite. Inflict upon the body severe injury, and the mind presently suffers; and, *vice versa*, severe and protracted grief, disappointed love, heavy and irreparable losses of property, of friends, and many other mentally depressing causes, react injuriously upon the body, and probably first upon the stomach, and other digestive and assimilating organs; giving rise to indigestion, and, as a consequence, to malassimilation, and, as a sequence, defective nutrition, with a long train of what we call nervous symptoms.

The cravings of hunger are at once appeased by the receipt of greatly perturbing or distressing intelligence; protract this distress indefinitely, and disease will surely follow. If any predisposition exist, we may look for Saccharine Diabetes, or some other malady growing out of deranged or imperfect innervation. That Saccharine Diabetes then is a disease, or rather the symptom of a disease, the remote cause of which may be sought for in the nervous system, I think admits of no rational doubt: the assertion, however, of any hypothesis, no matter how plausible, without reason to sustain it, is an illogical and unsatisfactory mode of reasoning. I shall therefore be excused by the Society for trespassing upon its time, while I present the reasons, collaterally, remotely, and immediately, bearing, as I conceive, upon this subject. If it be admitted that it is of nervous origin, where, or in what part of the brain or cerebro-spinal system, shall we locate it? I answer, at the base of the brain (in the fourth ventricle), or perhaps in the medulla oblongata.

The nerves presiding over and controlling the functions of the kidneys, and their congeners, the procreative organs, have, by physiologists and phrenologists, by common consent, from time immemorial, been located, and not without reason, in that part of the brain. Who among us that ever heard that king among lecturers, Professor Caldwell, on Physiology and Phrenology (for he lectured on and taught both), that does not remember his phrenological illustration of the location of the amative and procreative organs, by reference, among many other examples, to the case of a man who, from the receipt of a blow upon the occiput, had priapism as the result, and whose venereal propensities became so inflamed, that he broke over all restraints of decency; and, unless forcibly restrained, would have committed a rape upon any person that wore the female attire, even his own daughters? This, too, from a blow over the cerebellum. Again, Dr. Errichsen says that he saw a case of Saccharine Diabetes supervene upon a slight contusion upon the back of the head of a man who fell from a hay-stack; it disappeared, however, upon a reparation of the injury. And just here, allow me to state what I witnessed some seventeen or eighteen years ago, in my own practice, as collaterally, at least, connected with this investigation. Early in the morning, I was sent for urgently to visit a young, stout, athletic negro man, the property of Mr. W. O. Hyde. In this fellow was fully developed all the points indicating his strong venereal propensities and lusts: short, thick, bull-neck; very prominent occiput; most of his brain behind his ears, etc. Upon reaching his

house, which was very near the dwelling, I found him very much alarmed and greatly excited. He was the subject of priapism. The sword had been drawn, and he was unable to return it to its scabbard. My old preceptor's case at once suggested itself to my mind; and my first inquiry was, Have you struck the back of your head against any hard body, or in any manner hurt your head, or any part of it? He replied not. Do you feel any uneasiness about your head? He said that the back of his head hurt him. He then gave me, in the presence of his master, a full and frank statement of the facts of his case—and the cause of the priapism was apparent—he substantially stated as follows:—An addition had been made to the family, a day or two previously, of a young and likely girl, a house servant. They occupied the same room: the light of the apartment had scarcely grown dim, before he softly approached her couch, embraced her, wooed and caressed her, with all the soft and delicate expressions of love and affection that his amorous feelings could suggest. Not even the chivalrous and redoubtable knight of the broken helmet could have felt more deeply enchanted, when he mistook, in the enchanted inn, the embraces of a black, thick-lipped wench, for his own matchless and pearless *Dul Cenia del Toboso*. Our hero, however, wooed in vain: while she permitted such liberty calculated to inflame the ardor of his passions, she positively refused the only indulgence that could cool the incalescence of a passion which, before day, wrought itself up to a red heat. A little after the dawn of day, however, her hitherto inexorable determination yielded; and he had not more than fleshed his sword, before the sudden opening of the chamber door, and the voice of the mistress, so startled *her*, that suddenly springing up, she dismounted the hopeless knight, and left him musing upon the uncertainty of all sublunary affairs, and thoroughly impressed with the truth of the adage—that there is many a slip between the cup and the lip.

The facts of the case obtained, I immediately turned loose upon the bristling front of this great moral persuader, as the Irishman would call him, the most effective artillery at my command—the lancet, tartar emetic, *ad nauseam*, cold effusions to the back of the head and neck, were all called into active requisition, and were perseveringly played upon him for 12 or 14 hours. When unable to longer *stand* under the unequal contest, he capitulated, and lowered his colors, slowly and sullenly retiring within his breastworks; refusing, however, an unconditional surrender. For, even on the third day, he was, as the boys would say, in a big limber, still showing fight. Dropping

the metaphor, this case did not fully recover until a large blister was drawn between the shoulders. The then owner, Mr. W. O. Hyde, resides within three miles of this city, and will vouch for the truth and accuracy of this statement.

What are the legitimate inferences to be drawn from this and similar cases? None other, than that disturbance of the nervous centres cannot long exist without derangement of the functions of the organs over which they preside; and the derangement will be in proportion to the intensity of the disturbing cause.

In the case just detailed, there was intense excitement, long continued, the most intense perhaps of all other excitements, producing an erethism of the nervous centres, that nothing but active treatment and time could quell: the erection was the effect of a mere symptom, violent reflex action; remedy the source—strike at the fountain, *fons et origo mali*, and the erection subsides; let both go unchecked, inflammation sets itself up in the virile organ, and perhaps mortification and gangrene will lop off an invaluable member: we see an analogous case in traumatic tetanus, in the unyielding rigidity of the muscles; modified, however, in this particular—the one is influenced by the excito-secretory, the other by the excito-motory system of nerves.

The reverse of this obtains; in Diabetes Melletus this disease is generally slow and insidious in approaches to the system; and, as I have ascertained from two of the sufferers, one of whom fell its victim, a total loss of virility, in the male, is among the first symptoms that give anxiety to the patient. Is not the remote cause of this disease in close proximity with the nerves of procreation, and by which they are, at least, sympathetically impressed?

This indifference to the whisperings of venereal indulgence cannot be charged to debility, for we know that in some other diseases (phthisis pulmonalis, for instance), where the debility and prostration are much greater, the venereal propensities, instead of being annulled, are, in fact, rather increased; and it is perhaps the last passion that yields to this voracious destroyer.

I have already alluded to the slow and almost imperceptible manner in which Saccharine Diabetes invades the system; and, with the views of its pathology already expressed, the Society are prepared to understand, first, that I regard it as the effect of combined physical and mental causes, operating upon the system indefinitely; and, secondly, that the disease rarely originates in any other way, except by hereditary transmission, and only then when the dormant susceptibilities are aroused by

some exciting cause; mainly, I believe, by indulgence in improper diet. That the disease is hereditary, admits of no doubt. Dr. Prout informs us that he has seen and treated many cases of Saccharine Diabetes, that were clearly hereditary in their origin. Drs. Golding Byrd, Watson, and others, confirm this statement. Indeed, we need not go beyond the limits of our own little city for proof of the hereditary origin of this disease, as two distinguished members of this Society, now present, can testify. That the disease generally originates from wear and tear of mind and body, let an example or two be submitted. Some 12 years ago, there might be seen on College Street a stout, healthy, robust young man, with no hereditary taints about his system, engaged in the vocation of a livery-keeper. Family afflictions, of a severe character to a sensitive mind, overtook him. He purchased a farm in the country; abandoned the city and a life of ease for the sterner and more laborious pursuits of agriculture, in which he actively engaged himself, making a hand in the field. In a short time, the mental abrasions still going on, his health began to fail; medical advice was sought, and, at different times, running through a period of seven or eight years, he was treated by half a dozen or more of the most eminent physicians of this city. His health, however, still continued to go down: a visit to some fashionable watering-place was advised, with no benefit; rather an aggravation of his disease. Some three or four months before his death, circumstances threw him into my neighborhood. The character of his malady, by this time, was unmistakable. It was Saccharine Diabetes, beyond any doubt; but so insidious had been its march, so obscure its symptoms, that it eluded the notice of his physicians. The complications supervening, not long before his death, and which, most likely, would have attracted the attention of the uninitiated, were pulmonary tuberculosis, with convulsions; a very frequent termination of the malady, if we may trust the authorities; the organ last attacked indicating the original seat of the disease. This case is an instructive one. It was at no time characterized by the excessive discharges of which we read, and, indeed, generally witness in the affection; had it been, there would have been no difficulty in correctly diagnosing it, in the beginning. The amount of urine passed was not greatly over the normal standard; but, I have no doubt from his statements, that it had been Saccharine from the beginning.

One more case, gentlemen, and I will dismiss this branch of the subject. A gentleman well known in this community, of

rather delicate physical structure, of sanguine temperament, of very active and industrious habits, and who accumulated an estate by his energy and indefatigable attention to the business and duties of an office that required unceasing mental as well as physical toil. Under such protracted exertion, his digestion became impaired, and Saccharine Diabetes supervened, as a consequence; in a few months, he was numbered among the victims of that fell destroyer.

Here we see all the cases in full operation, aided, perhaps, by inattention to proper dietetic regulation, to wake up the susceptibility, the predisposition that might otherwise have remained in abeyance in his system.

And here, gentlemen, allow me to ask, Did ever a case of Saccharine Diabetes fall under your observation that could not be traced to antecedent causes, such as I have described; excepting, always, such as are of hereditary transmission? And, second, have you ever discovered a case in the Negro? If not, why is he exempt from it? Let Ariel answer.

Having now, though in a very imperfect and unsatisfactory manner, I confess, settled the pathology of the disease, the remote pathology, it may be expected that I should say something of its proximate cause. How and where is the sugar formed? What particular organ or organs elaborate it? And, first, as to the proximate cause, let the illustrious Prout—though dead, he still speaketh, and will speak as long as urinary pathology shall have a votary—he says: the proximate cause of Diabetes is exceedingly obscure; that if you will tell him how fat is formed in the animal economy, or how bile is formed in the liver, he will tell you how sugar is formed in the body. The same distinguished man, in the first edition of his book on Urinary Pathology, says: it is formed in the kidneys. He subsequently abandoned that ground, and located its formation in the *primæ viæ*. The experiments and observations, however, of still later pathological investigators, locate it in the liver. Among the latter may be mentioned the names of Monsieur Bernard, of Paris, an announcement which he made about the same time that Marshall Hall made and announced the discovery of a second system of nerves, which he named the excito-secretory;* having previously announced the discovery of the excito-motory. Dr. Hall's second announcement of the excito-secretory system

* And before this announcement, Professor Campbell, of Georgia, had already announced the same thing. Dr. Marshall Hall, in an autograph letter to Dr. Campbell, concedes to the latter priority of claim to the discovery, and gracefully adds:—"The field is indisputably your own."—[Ed.]

was based upon what he styled "the brilliant experiments of Monsieur Bernard," and particularly his experiments upon the pneumo-gastric nerve, in relation to the secretions of the liver. It will be remembered by this Society, that our own countryman, Henry F. Campbell, of Georgia, claimed priority in this discovery, and opened a correspondence with Marshall Hall, in reference to it. How the matter was adjusted between them, or what the award of the literary world was, I am unable to say. But, to return from this digression, Dr. Bernard's experiments were reported by Dr. Pavy, of London, a gentleman whose fame as an able pathologist is second only to Bernard's. Dr. Davis verified and confirmed the experiments of Bernard, and pushed them still further; thereby furnishing to our profession a noble example of justice and magnanimity, of giving to Cæsar the things that are Cæsar's. The contempulle really too frequently existing between master minds of the same locality, and especially of different nationalities, too often distorts, and seeks to detract from the merits of each other. Not so, however, with Hall, Pavy, and Bernard. In the same great field, as yet but little explored, the trio march forward hand in hand; and, while enriching science with their discoveries, they are making for themselves imperishable fame.

But to return: a few of the conclusions at which these distinguished men have arrived, based upon observation and experiments, are, that the liver, during life, produces no sugar, but only the substance, named by Bernard, glucogen, but which Dr. Pavy prefers to call hepatine; now, however, he calls it amaloid, and it is only under peculiar circumstances in the living subject that it becomes sugar: the sugar found in the liver and blood, after death, is a *post-mortem* change of hepatine. Cane sugar administered appears as grape sugar in the urine. Hepatine is not naturally formed for transformation into sugar. It is probable, they say, that an altered state of the blood can produce the change by which hepatine passes into sugar: phosphoric acid, injected into the jugular vein, produces sugar, by destroying the alkalinity of the blood. The saliva, blood, and tissue of liver transform hepatine into sugar most readily. Contact with saliva, at 100 Fah., almost instantaneously. Dr. Pavy believes that hepatine goes to the formation of fat; that it does not enter the blood, as hepatine or glucogen, may be inferred from the fact that when that substance is mixed with the blood, it immediately becomes sugar. Dr. Pavy believes, with Bernard, that sugar taken into the stomach is not absorbed by the lacteals, but passes into the portal circulation; in the

liver it will appear to become hepatine, and to undergo some other change before it enters into the system. The views formerly entertained, and in which Dr. Pavy concurred, as to an extensive destruction of the saccharine principle, especially taking place during the passage of the blood through the lungs, are now shown to be incorrect. I regret, gentlemen, that I have not the time to pursue this subject further, but would refer those desiring further information to a little book recently published by Dr. Jno. Camplin, of London. With the single expression of my own poor opinion, that the sugar is formed in the *primæ viæ*, from causes already detailed, passes thence into the blood, and eliminated by the kidneys.

I now pass to a detail of the cases promised, with their treatment, as briefly as circumstances will allow me, having wearied the Society, I fear, with a paper much longer than was intended.

Case I. Mr. C. G., a citizen of this city, aged about 56, very black hair and eyes, dark and florid complexion; cabinet workman by profession, sought medical advice from me, a little more than 12 months ago. I had known Mr. Gower for many years; lived near me when I resided in the country: from being a stout and very active man, he was so reduced and enfeebled that he excited the sympathies of all who knew him. He tottered as he walked; he did not attempt to walk unless supported by his cane. He was free of cough, or I should have supposed him far gone in consumption.

He told me that for about three years he had been troubled with frequent and heavy discharges of urine. The Doctors called his disease "Diabetes." He had consulted with several medical gentlemen, and had been under treatment for more than two years, but had steadily gone down until he could hardly put one foot before the other. "How much water do you pass in twenty-four hours?" "From 16 to 18 pints." "Have you *measured* it?" "I have." "Have you been passing that quantity all the time?" "Well, I don't know that I have every day and night, but I pass a great deal all the time." "What is the color of your water?" "About the common color—rather deeper at some times than others; and, as I pass it in a vessel, seems thick, and foams like soap-suds." "Have you ever tasted it, or had reason to believe that it contained sugar?" "I have; the Doctors told me that there was sugar in it. I know it has, for the flies swarm around it, as they do about a leaky molasses barrel; and, when passing it, a drop that chances to fall upon my pants, upon drying, becomes of a whitish cast; or, if I make water upon the grass about the yard, upon drying, it leaves a

whitish-looking deposit." No chemical tests or analyses were necessary to assist the diagnosis in this case. It was beyond doubt a case of Saccharine Diabetes, and, as I thought, beyond remedy. He was troubled, also, with tormenting thirst and a voracious appetite, and at night especially, with horrible pains of the loins, hips, and legs. I commenced, after giving him strict injunctions as to diet: directing him to refrain from, as far as practicable, all food of an amylaceous character. I put him on creasote, four-sixths of a drop diluted in water, to be taken during the day and night, with opium, *pro re nata*, from two to four grs. per day, with various plasters, unguents, liniments, etc., to the different seats of pain. Passed the electric current several times through his emaciated and dwindled lower extremities. Under this treatment the disease was mitigated and held in abeyance. The quantity of urine diminished; and in some respects his case was more hopeful; but he gained neither flesh nor strength. Thus stood the case until the first of January last, about which time I saw in *The New York Medical Record*, a notice of a new work on Diabetes Melletus, by Dr. John Camplin, of London, himself a diabetic. The book bears the title: "On the Jurantia et Sedentia in Diabetes." I lost no time in procuring a copy, which I did in a few days, through the kindness of Messrs. Paul, Tavel & Hanner, booksellers of this city. Gave it a cursory examination, and, as speedily as possible, adopted the treatment to the letter indicated by Dr. Camplin. The change in my patient was not only unexpected, but I almost doubted the possibility that in so short a time dietetic regulations only could have wrought such a change. I regarded it either as a miracle, or one of those freaks in disease now and then met with, where apparently rapidly-approaching death lets go its grip, and lets the prisoner free, notwithstanding the prognosis of the Doctor. In three days, Mr. G. will tell you, his urine diminished at least one-half; his pains, so agonizing before as to require opium, left him, as by enchantment; his mouth and tongue, before dry, became moist; salivary glands discharged their functions well; relished his chew of tobacco, and spit as well as anybody; his spirits, before gloomy and depressed, became buoyant and cheerful; and, in eight weeks from the time he commenced the treatment, he had gained 8 pounds, or 1 pound a week. By this time could chop his own wood, get his own water, walk the distance of nearly a half mile to market, with basket on arm, and back, without fatigue.

This is a truthful and correct account of the progress of this

case under Dr. C.'s treatment. What treatment is it that can almost raise the dead? What raised the Doctor himself (who was almost at death's door) from the same disease; and, as he avers, not only mitigated, but cured a number of cases, almost as far gone as his own? The character of the man, as set forth in his writing; his associations with such men as Dr. Prout, whom he consulted, and who suggested the bran-cake as a proper diet for him, taken altogether, leave us no doubt of the truth of his statements; more especially, when, to a great extent, we have verified them to the letter; and found that whenever the patient violated the programme of diet, the injurious effects would be manifested in less than ten hours.

The treatment is mainly dietetic, and consists in a total abnegation of all and every species of amylaceous food. Touch not, taste not, handle not, *starch*. It is an unclean thing in this disease. As soon as swallowed it is converted into sugar; and in proportion to the quantity taken will be the amount of sugar manufactured; which excites the kidneys; and the flood-gates are open; and wasting and exhausting discharges drain the body of flesh and strength, besides deranging almost every function. Dr. Prout suggested to Dr. C. the bran-bread or cake: Complin tried it, with no good results, because it contained 52 per cent. of starch, as an analysis proved. Complin then determined to have the starch washed out, which he did, by passing it through two or three waters. That done, it was dried in a quick-oven and pulverized; then milk, eggs, soda (or not), ginger or nutmeg, and the whole kneaded with butter and baked in small pans, quickly, make up the Camplin bran-cake; which, as it contains no starch, may be eaten with impunity by the patient, with butter, mutton, pork, cheese, milk, and soft eggs. Vegetables are permitted, of the non-amylaceous family. My patient ate freely of cabbage and sour-krout during the winter, and no bad results were noticed after it. As to medical treatment, I have but little to say. No therapeutic agent, I believe, it is conceded, exerts much influence over the formation of the sugar; and any medicine or food that cannot or will not do that, will be either nugatory or mischievous. Medicines may be, and no doubt are necessary, *pro re nata*, during the existence of the disease. The liver, the skin, the bowels and lungs, should in this, as in all diseases, share our attention.

Case II. This case is a sprightly, intelligent young lady of this city, who, while in the city of New York, on a visit, last winter, had an acute attack of hereditary Saccharine Diabetes. I say hereditary. Her father died of the same malady, about

two years ago. Her friends had her brought home here. Dr. Atchison, the family physician, aided by Dr. Joseph Jones, was in charge of her case, when I also was invited to see her. Finding that she was upon the Camplin treatment, already detailed in case 1st, I retired, leaving the case in the care of the above-named gentlemen.

Dr. Atchison, at my request, furnished me, a few days since, the following statement in reference to the treatment, results, etc., of the case, *viz.:*—

Dear Doctor:—The following is a brief outline of the case of Diabetes Mellitus, now under my care:—A young lady, aged 18, light hair, fair skin, small stature, having previously enjoyed good health, was attacked about the 1st of January, while on a visit to the city of New York, with what was at first supposed to be by her physicians remittent fever, characterized by great thirst, dry tongue, febrile exacerbations in the evening, loss of appetite, etc. After two or three weeks of unavailing treatment, attention was called to the urinary organs, and an analysis made of the urine, which revealed the following results:—The amount of urine passed in 24 hours, 5½ pints; sugar per ounce, 5 grains; specific gravity, 1038. She was immediately ordered on ferruginous tonics, nitric acid, and the Camplin diet. Her friends being informed of her condition, she was ordered home: treatment was not commenced until the 16th of February, when, assisted by Professor Joseph Jones, another analysis was made, showing: 7 grs. sugar to the ℥j., with a specific gravity of 1040; quantity passed, 7½ pints per day.

No appearance of catamenia for three months. Bowels constipated and distended; countenance pale; digestion feeble. Ordered pills, Vallet's mass., co. extract colocynth, ex. nux vomica, to be given three times a day, with cod-liver oil, and the Camplin diet to be rigidly adhered to, with saline baths and free exercise in the open air. No material change for about two weeks. Quantity of urine per day varying from 5 to 7 pints. At this time a large amount of scybalous matter was discharged from the bowels, with great relief. Appetite and general appearance improved. Specific gravity of urine fallen to 1020; quantity not materially lessened. Pills and cod-liver oil withdrawn; ordered phosphates of soda, lime, and iron, to be given in milk, after each meal. Diet continued, and visit to the country. In about three weeks she returned much improved, voiding only about 3 pints per day. No analysis made. Has gained strength, and general appearance good. Treatment continued, and again ordered to the country. From that time

the convalescence was uninterrupted. Menstrual flux occurred on the 3d of May, normal in quantity, and without disturbance. Quantity of urine now passed per day, about 2 pints, healthy in appearance. Bread is now allowed in moderate quantities. She has resumed her natural gaiety and *embonpoint*, and seems perfectly well; though, as a prudential measure, her diet is still much restricted.

In conclusion, gentlemen, I will add, that when either of these patients departed from the programme of diet, the bad effects were clearly observed in 8 or 10 hours; the amount of urine being greatly increased; and, I have no doubt, the increase was due entirely to the conversion of the starch into sugar, which stimulated the kidneys to increased secretion.—*Nashville Journal of Medicine and Surgery.*

A NEW TREATMENT FOR CHRONIC DYSENTERY.

By E. MALCOLM MORSE, M.D., San Francisco.

Chronic Dysentery generally means inflammation and ulceration of the large intestine. Instead of expecting a cure by giving medicines by the mouth, to act through the blood, or to travel ten yards before arriving at the seat of the disease, or giving medicated enemas in so small a bulk that they are hardly sufficient to fill the rectum, I have been in the habit of washing out the whole rectum and colon by throwing up into the large intestine from two to five pints of Labarraque's solution of the chloride of soda, diluted, thus making a topical application to the ulcers of one of the best, most cleansing, stimulating, and healing solutions contained in our Pharmacœpia. This remedy gives little or no pain, is perfectly safe, and may be considered a specific in uncomplicated ulceration of the large intestine. By uncomplicated ulceration of the large intestine, I mean dysentery not kept up by the organic disease of the heart, or phthisis pulmonalis; and not dependent on irremediable obstruction of the liver or spleen. For in each of these four cases the dysentery is produced by, or complicated with, a more serious primary disease.

In presenting to the members of the Medical profession, this plan of treatment for chronic dysentery, not found in any of the text books with which I am familiar, I would feel some hesitation, and not a little responsibility, did I not know that the theory itself is based on rational principles; and the success of

the application of this theory as witnessed by myself during eleven years, is so marked that I can confidently recommend it as a safe cure for some of the worst cases of this formidable disease. I have seen patients that have been suffering for months and even years, with chronic dysentery, rescued by the application of these chloride of soda enemas, from the jaws of death.

The mortality in chronic dysentery, both under the old and the latest method of treatment, is very great.

On examination of the bellies of those who have died with this disease we find the mucous membrane of the large intestine extensively ulcerated; very often ulcers are low down; they are found principally in the rectum and descending colon; often in the tranverse colon and cæcum. Dr. Wood says: "The mucous membrane of the rectum and the lower portion of the colon always evince signs of inflammation in cases of death by dysentery. It is much reddened and thickened and not unfrequently ulcerated. Ulcers, in fact, exist in this disease more frequently than in any other acute inflammation of the alimentary canal, unless in the follicular enteritis of typhoid fever and small-pox. The danger is proportionate to the extent of the colon involved." Now, if we have a patient suffering from a simple ulcer in the mouth, we do not attempt to heal it by throwing up astringent or opiate enemas into his rectum; we apply the remedial agent directly to the seat of the injury. And if we have a patient with ulcers in the colon, why not apply the proper medicine at once to the proper place?

In order to get the patient into a proper condition to derive the most benefit from these injections, I am in the habit of pursuing the following method. I regulate his diet carefully, of course, and keep him in a recumbent position in order to assist the return of blood from the engorged mesenteric veins, and those smaller tributaries which are distributed along the large intestine. This state of engorgement prevents the ulcers from healing, and renders each ulcer an outlet from which, in blood serum, the stream of life ebbs out like water from the tubs of the daughters of Danaus. At day-break on every alternative or fourth day, I give a mild cathartic or aperient, in order to clear out the alimentary canal. The ordinary contents of the intestine produce great irritation when it is in this engorged and hyperæsthetic condition; and it is better to get rid of the fæces about the same time, instead of letting them run in driblets over the raw surface every hour or two. After the cathartic or aperient has acted sufficiently, I inject very slowly from

two to four pints of Labarraque's solution of chloride of soda, diluted, into the large intestine; in this way it becomes a topical application. The right strength for the first enema, is twenty parts of water to one of Labarraque's solution. I inject as much of this mixture as he can be made to retain. Two or three pints will generally be enough. Sometimes as much as five pints may be given. Each enema should be a little stronger, until the patient can feel it smart or burn. When this happens the solution is of the proper strength. The patient should be on his right side, or on his knees with his head low down, while these enemas are being administered. Occasionally it is necessary for him to change his position several times, in order that the wash may reach every point where it is needed. Should there be much tenesmus after the injection has been passed, I give an enema of the tinct. opii, or an opium suppository. These applications of the chloride of soda should generally be made once a day. Occasionally it is necessary to give them twice a day; and sometimes on account of the sensitiveness of the ulcers as they begin to heal, it is better to leave them off for several days, or give weaker solutions. The next indication in the treatment, after cleaning out the alimentary canal and washing the ulcers with the medicated solution, is to keep the bowels quiet, so that the ulcers may remain clean and heal up under the topical application. In suggesting the means of accomplishing this desideratum, I am getting upon very debatable ground. The old proverb, "tot hominies tot sententiones" must certainly have been arms intended for physicians. Each one of us has his own way of using the with which we combat disease. I generally give large doses of subnitrate of bismuth, three times a day; repeated opiate enemas and suppositories, in order not to disorder the stomach; Dover's powders, repeated if necessary; charcoal, or the mineral and vegetable astringents; the ant-acids, leeches and foementations; taking great care to *keep up* the effect of the medicine, by giving them every hour or two. If one drug fails I try another, or give a combination of several of them; in order to have as few stools as possible passing over the ulcerated surfaces while they are healing.—*California Medical Gazette.*

Spirograph.—We learn from the *Lancet*, that Dr. David C. McVail, of Northumberland, has constructed an instrument which, as he claims, will record the respiratory movements accurately, and can be applied easily to any portion of the chest or abdomen.—*Med. and Surg. Reporter.*

Book Notices.

Transactions of the American Dental Association, at its Fifth and Sixth Annual Meetings, in 1865 and 1866.

This is an octavo volume of over 500 pages, containing a goodly number of addresses, reports, discussions, papers, etc. Among them, we would particularly mention the following:—

The report on Dental Physiology, by Dr. Fitch, of New York, contains suggestions of high importance. An article on Dental Hygiene, by Dr. Chase, of Iowa, is good, but would be better if longer. A paper on the Development and Reproduction of Animal Tissues, by Dr. Buckingham, of Philadelphia, is a good exposition of Virchow's cell theory. The reports upon Pathology and Surgery, by Dr. Atkinson, of New York, contain much that is interesting, but are somewhat transcendental; reminding one of the writings of Andrew Jackson Davis. The remarks on Dental Manipulations, by Dr. McQuillen, of Philadelphia, should be read and remembered by all bunglers. An article on the Sacrifice of Human Teeth, by Dr. Knapp, of New Orleans, ought to be read and studied by all medical juveniles "who love to pull teeth." The remarks on Dental Education, Quack Tooth-Powders, Reproduction of Alveolar Processes, Dental Hygiene, and many other subjects of like import, are all well worthy of perusal. In one of the discussions, the Exsection of Exposed Pulps, by Dr. Allport, of Chicago, is commented upon. The address by the late Dr. Brainard, on Specialties in Medicine, and the remarks on the Brotherhood of Medical Science, by the Editor, are reported in full.

We are glad to see the dentists of this country thus organizing for the promotion of their branch of medical science and practice; and such action betokens that, at no distant day, all dentists of respectable standing must be graduates in medicine.

SANITARY STATISTICS OF CHICAGO FOR 1868.

The following is a carefully prepared statement of the facts that have been gathered within the jurisdiction of the Chicago Health Department, for the year 1868. These facts pertain to the sanitary and meteorological condition of the city; and there are some interesting facts, which may be discussed by the next social science congress. Although the number of deaths in the city is considerably larger than last year, the city has been considered in a very good hygienic condition throughout the year. The increased mortality may be attributed to the large increase in the rain fall, as well as to the growth of the city.

OFFICERS OF THE BOARD.

Commissioners—Hon. J. B. Rice, President; Samuel Hoard, Wm. Giles, A. B. Reynolds, H. A. Johnson, M.D., J. H. Rauch, M.D., Wm. Wagner, M.D.

Sanitary Superintendent and Registrar of Vital Statistics—John H. Rauch, M.D.

City Physician—N. T. Quales.

Health Officer—Ambrose Burnam.

Secretary—Jacob W. Russell.

Clerks—H. P. Wright, I. Rosenthal.

WARD.	*Sanitary Inspectors.*	WARD.	*Sanitary Policemen.*
1.	E. Powell, M.D.	1.	W. O. Ludlow.
2.	W. C. Lyman, M.D.	2.	M. W. White.
3.	J. M. Woodworth, M.D.	3.	S. Wilson.
4.	E. O. F. Roler, M.D.	4.	J. W. Buel.
5.	M. Mannheimer, M.D.	5.	J. Finnucan.
6.	R. M. Lackey, M.D.	6.	R. Blow.
7.	E. W. Lee, M.D.	7.	Thos. McGirr.
8.	P. Adolphus, M.D.	8.	J. J. Heckman.
9.	Geo. Kellogg, M.D.	9.	H. Musselman.
10.	W. R. Marsh, M.D.	10.	M. Cole.
11.	T. P. Seeley, M.D.	11.	L. S. House.
12	H. M. Lyman, M.D.	12.	H. L. Alexander.
13.	T. W. Miller, M.D.	13.	J. Hettinger.
14.	Geo. Schlœtzer, M.D.	14.	Jas. Keefe.
15.	J. Reid, M.D.	15.	Geo. Vocke.
16.	D. B. Trimble, M.D.	16.	G. W. Merrill.

Cattle Inspector at Union Stock Yards—S. P. Hopkins.

Janitor—J. Rosenthal.

MORTALITY FOR THE YEAR 1868.

Abdomen, injury of,	2	Cellutis,	2	gual	2
" tumor of,	7	" pelvic,	2	Glottis, spasms of,	1
Abscess,	5	Cerebellum, disease of	1	Gout,	2
Accident, drowned	46	Cerebritis,	2	Groin, cancer of,	1
" burned,	2	Chicken pox,	2	Hemorrhage,	10
" machinery,	4	Childbirth	10	Heart, congestion of,	1
" railroad,	21	Chlorosis	1	" disease of,	80
" fall,	7	Cholera infantum,	743	" dropsy of,	5
" gunshot,	7	" morbus,	25	" hypatrophy of,	5
" poison,	8	Colic, lead,	1	" inflammation,	1
" scalding	6	Colitis,	1	Herniplegia,	5
" suffocation	4	Convulsions,	607	Hepatitis,	20
" from other causes,	31	" puerperal	11	Hernia,	9
Anæmia,	4	Cyanosis,	6	Hydrocephalus,	129
Anasarca,	5	Croup,	112	Hydropericardium,	2
Aneurism, rupture of	1	Cystitis,	1	Hydrothorax,	14
Angina,	13	Debility	79	Ileus,	3
Anus, cancer of,	1	Delirium tremens,	18	Inanition,	97
Aorta, aneurism of,	2	Deficient development	1	Indigestion	6
Aphthæ,	5	Diabetes,	1	Infanticide,	1
Apoplexy,	5	Diarrhœa,	203	Injuries,	2
Aseites,	6	" chronic,	47	Insanity,	2
Asphyxia,	3	Diphtheria,	88	Insufficiency of aortic semi-lunar valves,	1
Asthma,	4	Dropsy,	41	Intemperance,	20
Atelectasis pulmonium	6	Duodenum, cancer of	1	Intestines, injuries of,	1
Atrophy,	2	Dysentery	153	Ischuria,	1
Births, premature,	170	Dyspepsia	2	Jaundice,	11
" still	395	Eczmea,	1	Kidneys, Bright's disease of,	15
" tedious,	9	Embolia,	1	" disease of,	4
Biliary calculi,	1	Encephaloid, general	1	" inflammation	12
Bladder, hemorrhage	1	Endocarditis	3	Laryngitis,	22
" inflammation	1	Enteritis,	39	Leg, compound fracture of,	1
Bowels, inflammation,	44	Enterocolitis,	16	Leg, tumor of,	1
" congestion of,	6	Epilepsy	11	Leucocythæmia,	1
" cancer of,	5	Epistaxis,	1	Lientery,	1
" gangrene of,	1	Erysipelas,	26	Liver, abscess of,	1
" hemorrhage of,	1	Exhaustion,	5	" atrophy of,	2
" obstruction of	1	Exostosis,	1	" cancer of,	2
" perforation of	2	Exposure,	2	" cirrhosis of	7
" ulceration of,	7	Face, cancer of,	1	" congestion of,	3
Brain, concussion of	2	Femur, compound fracture of,	1	" fatty, degeneration of,	1
Brain, congestion of,	57	Fever, congestive,	13	" disease of,	4
" compression of,	1	" intermittent,	7	" enlargement of,	1
" effusion of,	1	" puerperal,	35	" induration of,	2
" disease of,	16	" remittent	9	" tumor of,	1
" inflammation,	72	" scarlet,	173	Lungs, abscess of,	1
" softening of,	8	" typhoid,	199	" apoplexy of,	1
" tubercular dise.	2	" typhus,	6	" congestion of,	46
Breast, cancer of,	10	Fungus, hæmatodes,	2	" effusion of,	1
Bronchitis,	74	Gangrene,	7	" emphysema of,	3
Carbuncle,	2	Gastritis	28	" hemorrhage of,	11
Cancer,	7	Gastro-enteritis,	13	" paralysis of,	6
Calculus, prostrate	1	Gastromalaxia,	1		
Carditis rheumatic,	1	Glands, inflammation of parotid sublin-			
Catarrh,	3				

Malassimilation	1	Ovarian tumor,	5	Syncope,	2
Malformation,	1	Palate defective,	2	Syphilis,	3
Manslaughter,	5	Paralysis,	21	Tabes mesenterica,	158
Measles,	107	Paraplegia,	2	Tedious labor,	1
Meningitis,	66	Parotitis,	5	Teething,	188
" cerebro-spinal,	41	Pericarditis,	7	Tetanus,	12
" tubercular,	24	Periostitis,	1	Throat, cancer of,	1
Menses, suppression of	1	Peritonæum, cancer of	1	" inflammation,	1
Metral valves, insufficiency of,	2	Perdonitis,	39	" malformation,	1
" disease of	2	Phargugitis,	1	" malignant sore	1
Metritis	4	Phlebites, uterine,	1	Tongue, cancer of,	2
Metro-phlebitis, puerperol,	1	Pluenitis,	4	Tonsillitis,	1
Miliasia, puerperum,	1	Phthisis pulmonalis,	418	Trismus	1
Miscarriage,	1	Pleurisy,	12	Tumor, encephaloid,	1
Morbus coxarius,	5	Pneumonia,	333	Umbilical cord, sloughing of,	1
Mouth, canker sore of,	8	Purpura,	1	Umernia,	7
" cancer of,	1	Pyæmia,	13	Urethra, stricture of,	1
" ulceration of,	1	Rectum, cancer of,	1	Uterus, cancer of,	18
Mumps,	1	Rheumatism	7	" disease,	1
Myelitis	4	Scrofula,	9	" hemorrhage of,	4
Neck, cancer of,	3	Scurvy,	1	" inflammation,	1
Necrosis,	1	Septuernia,	1	" rupture of,	1
Nervous irritation,	1	Skull, fracture of,	4	" tumor of,	1
Nutrition, impaired,	4	Small-pox,	146	Urinary infiltration,	1
Occipital bone, depression of,	1	Spine, caries of,	3	Varioloid,	6
Œsophagus, stricture	1	" disease of,	4	Vitality, deficient,	7
Œdema glottedis,	3	" dropsy of,	2	Whooping-cough	86
Old age,	73	" injury of,	2	Worms,	1
Opium, overdose,	1	Stomach, cancer of,	22	Unknown,	22
Ovaritis,	1	" congestion of	3		
		" hemorrhage,	1	Total,	5960
		Stomatitis,	1	Accidents & suicides,	205
		Suicide,	33	Immigrants,	163
		Sunstroke,	23		

AGES.

Under 1	2238	30 to 40	447	90 to 100	2
1 to 3	1187	40 to 50	323	100 to 105	2
3 to 5	291	50 to 60	175	Unknown	18
5 to 10	304	60 to 70	167		
10 to 20	202	70 to 80	123	Total	5960
20 to 30	447	80 to 90	34		

Males, 3243	Females, 2717	Total, 5960
Single, 4740	Married, 1220	Total, 5960
White, 5893	Colored, 67	Total, 5960

NATIVITY.

Africa,	2	Ireland,	512	Sandwich Islands,	1
Austria,	6	Isle of Man,	2	Scotland,	41
Bavaria,	3	Italy,	7	Sweden,	137
Bermuda,	1	Jamacia,	1	Switzerland,	9
Bohemia	62	New Brunswick,	2	At Sea,	2
Canada,	62	Newfoundland	1	United States,	920
Chicago	3162	Norway	113	Wales,	2
Denmark,	7	Nova Scotia,	2	West Indies,	1
England,	107	Prince Edward's Island	1	Unknown	29
France,	13	Poland,	10	Total,	5960
Germany,	705	Russia,	2		
Holland	35				

MORTALITY BY WARDS.

1st Ward,	92	Armory,	2	Hospital for Women and Children,	6
2nd "	213	Bridewell,	9	Home for Friendless,	31
3rd "	284	Chicago River,	15	Immigrants,	163
4th "	305	Convent of the Sacred Heart,	1	Lake Michigan,	14
5th "	348	County Jail,	1	Protestant Orphan Asylum	26
6th "	356	Hospital of Alexian Brothers,	4	St. Joseph Orphan Asylum,	28
7th "	673	Hospital of Cook Co.,	126	Police Station,	3
8th "	371	Hospital of Lake Co.,	22	Soldiers' Home,	7
9th "	306	Marine Hospital,	10	Yard of Rock Island Railroad,	1
10th "	205	Mercy Hospital,	34	Unknown	3
11th "	336	St. Luke's Hospital,	11		
12th "	458	St. Mary's Hospital,	1	Total,	5960
13th "	319	Half-Orphan Asylum,	2		
14th "	377				
15th "	512				
16th "	285				

PERCENTAGE OF DEATHS BY WARDS FOR 1868.

Wards.	No. of deaths.	Population in 1868.	1 death in	Wards.	No. of deaths.	Population in 1868.	1 death in
1st,	92	9,094	97¾	9th,	306	19,297	63
2d,	213	13,074	61⅜	10th,	205	12,925	63
3d,	284	15,076	60	11th,	336	14,340	42⅝
4th,	305	17,796	58⅓	12th,	458	17,485	38
5th,	348	16,033	46	13th,	319	11,164	35
6th,	356	13,083	6⅔	14th,	377	14,839	39⅓
7th,	673	25,492	38	15th,	512	21,078	41
8th,	371	15,813	42½	16th,	285	15,465	61⅓

METEOROLOGICAL.

Highest and lowest temperature, with range of same, and rain, snow, and mortality for 1868; also mortality for 1867, with rain, showing the influence of want of drainage:—

1868.	Highest Temperature.	Lowest Temperature.	Range of Temperature	Rain.	Snow.	Mortality for 1868.	Mortality for 1867.	Rain.
	de F	de F		in.	in.			in.
January,	41	7	48	1.28	7¾	441	299	1.93
February,	56	9	65	0.93	4½	425	255	2.23
March,	72	5	67	5.25	5¾	381	280	1.59
April,	73	19	54	3.00		307	278	1.70
May,	75	13	62	2.73		321	241	4.22
June,	90	56	40	3.11		305	283	1.86
July,	100	70	30	2.89		897	597	1.52
August,	88	60	28	3.58		945	697	2.33
September,	84	43	41	7.08		741	507	0.40
October,	74	37	37	1.69		448	428	1.28
November,	62	27	35	2.60	⅜	401	370	1.77
December,	48	11	59	1.41	8¼	348	409	1.10
Totals,				35.55	30	5960	4644	21.93

Meteorological observations made with regard to the temperature at the Dearborn observatory, by Prof. Safford, and at 119 Randolph Street, by J. G. Languth, show a daily difference of 3 deg. F. In 1867 one in 49 died by disease, and in 1868 one in 45¼ of our population. No epidemics have prevailed with the exception of small-pox, in the early part of the year, while there was a marked epidemic tendency during the summer of 1867. The health of the city at this time is remarkably good. An examination of the above table will show that during the months of June, July, August, and September, 16 66-100 inches of rain fell, and that during the same period in 1867 only 6 11-100 inches fell. This, in connection with the great mortality in the wards where there is the least sewerage, also that more than one-half of the total mortality was under five years of age, and 932 more, this than last year; in addition, that the deaths during the months of July, August, and September, when the influence of the want of drainage is most apparent, was nearly as great as the remainder of the year, clearly proves the cause. It may be said that for every inch of rain, that falls over 20 inches during the year, with our limited drainage, costs 100 lives.

MARRIAGES.

The marriages, as per record of County Clerk were 4684.

BIRTHS.

The following have been the number of births reported during the year:—

WARDS.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
January, males	3	6	8	18	7	9	30	12	23	15	23	17	5	13	33	12
females	3	11	14	16	3	5	33	14	24	22	20	22	6	13	27	10
February, males	5	8	6	15	5	4	38	25	10	13	12	15	4	13	30	18
females	5	6	11	14	2	14	33	15	19	12	9	27	5	9	26	18
March, males	3	7	16	27	9	16	47	25	12	16	14	25	10	22	28	14
females	2	12	12	15	4	12	47	23	25	19	19	24	6	8	16	15
April, males	4	9	13	12	4	10	41	20	24	17	11	23	6	18	29	12
females	3	21	13	17	3	11	34	12	21	4	10	30	6	15	24	15
May, males	1	8	7	23	5	9	40	12	21	16	19	29	9	19	20	16
females	3	12	14	20	3	18	32	10	14	11	13	19	7	15	24	17
June, males	3	6	12	22	1	15	29	18	18	11	14	33	7	32	20	15
females	2	2	11	24	4	9	35	14	10	12	13	13	4	15	26	5
July, males	6	6	10	14	4	15	36	15	33	12	8	19	10	26	33	12
females	3	13	6	17	4	6	25	17	18	15	11	26	8	20	23	11
August, males	6	13	20	19	8	20	43	24	27	14	26	26	13	24	27	13
females	6	19	13	23	8	9	47	19	20	12	19	33	11	28	27	14
September, males	6	6	17	17	6	13	38	21	31	17	18	32	11	32	24	9
females	3	7	18	14	6	13	30	19	7	18	14	34	6	19	25	17
October, males	2	13	16	26	9	13	37	19	17	21	16	27	8	21	22	11
females	2	8	16	25	10	14	36	22	23	15	11	25	10	22	31	9
November, males	6	15	20	22	8	17	38	18	25	19	15	36	17	27	32	13
females	3	10	9	21	4	14	28	13	22	13	16	32	15	26	23	14
December, males	5	9	7	14	5	12	18	13	19	14	16	30	16	23	20	4
females	1	11	15	15	4	12	20	18	18	10	6	13	20	16	16	13
Total,	86	235	304	450	126	290	835	418	482	348	363	600	220	476	606	307
Colored males,	2	7	10							2		3				
females,	1	6	7							2						
By wards, total,	89	248	321	450	126	290	835	418	482	352	363	603	229	476	606	307
Twins,		2	6	8	2	2	9	8	4	2	7	1	1	4	6	6
Triplets,					1											

Months.	Total.	Hospitals.	Colored.	Total.	Males.	Females.	Total by months.
January, males	234	9	1	244	244	.....	493
females	243	4	2	249	.....	249	.....
February, males	221	7	4	232	232	.....	467
females	225	8	2	235	.....	235	.....
March, males	291	8	1	300	300	.....	569
females	259	10		269	.....	269	.....
April, males	253	4	2	259	259	.....	501
females	239	3		242	.....	242	.....
May, males	254	4	3	261	261	.....	506
females	232	11	2	245	.....	245	.....
June, males	256	10	2	268	268	.....	482
females	199	12	3	214	.....	214	.....
July, males	259	4		263	263	.....	496
females	223	9	1	233	.....	233	.....
August, males	326	8	3	337	337	.....	642
females	292	10	3	305	.....	305	.....
September, males	298	11	2	311	311	.....	569
females	250	8		258	.....	258	.....
October, males	278	5	3	286	286	.....	574
females	279	7	2	288	.....	288	.....
November, males	328	6	2	336	336	.....	605
females	263	6		269	.....	269	.....
December, males	225	3	3	231	231	.....	444
females	208	3	2	213	.....	213	.....
Total,		170					6348
Colored, males		1		25	25		
females		2		18		18	
By wards, total		173					
Twins,		2					

There will be about 150 more reported for the month of December, making the total reported 6498. As near as we can ascertain, we have all, with the exception of about one-fourth, making the total births for the city 8312.

DEATHS BY MONTHS.

January,	441	June,	305	October,	448
February,	425	July,	897	November,	401
March,	381	August,	945	December,	348
April,	307	September,	741		
May,	321			Total,	5960

ANNUAL REPORT OF THE CITY PHYSICIAN.

CHICAGO, Dec. 31, 1868.—*To the Board of Health of the City of Chicago:* GENTLEMEN—I hereby submit my annual report for the year ending Dec. 31,

SMALL-POX HOSPITAL.

The number of patients remaining in the hospital, Jan. 1, 1868, was	42
Admitted during the year	296
Total,	338

The whole number discharged and cured was	314
The whole number of deaths	24
Remaining in the hospital at date	none
Total,	338

The number and diseases of those discharged cured, were as follows:

Vareola confluens	116
Vareola coherens	51
Vareola descreta	98
Varioloid	41
Rubeola	6
Scarlatina	2
Total,	314

The number and diseases of those who died were as follows:

Vareola confluens	20
Phthisis pulmonalis	3
Valvular disease of the heart	1

The mortality, it will be seen, is rather large, being about 7 per cent. However, when it is considered that four patients died from organic diseases during the stage of convalescence, having had the small-pox in a mild form, and that four died inside of 48 hours after their admission into the hospital, the percentage is considerably reduced and compares favorably, I think, with that of similar institutions elsewhere.

Among those admitted 22 had never been vaccinated, and 19 in which vaccination had been unsuccessful; of the former, 12, and of the latter, 8, proved fatal.

The average time of treatment in the hospital was 27½ days.

The nationalities were as follows:

Americans	123	Ireland	22	France	4
" colored	33	Norway	21	Scotland	5
Germany	79	England	11	Canada West	4
Sweden	29	Denmark,	7		
Total					338

CITY BRIDEWELL.

The number and diseases of those treated at the City Bridewell during the year ending Dec. 31, 1868, were as follows:

Delirium Tremens,	76	Pleurisy,	8	Wounds	49
Rheumatism,	45	Phthisis pulmonalis,	12	Contusions,	68
Syphilis,	98	Neuralgia,	24	Sprains,	14
Gonorrhœa,	24	Typhoid fever,	6	Abscesses,	15
Diarrhœa,	93	Intermittent fever,	18	Dislocations,	6
Dysentery	7	Remittent fever,	21	Fractures,	4
Bronchitis,	41	Erysepelas,	6	Granular ophthalmia,	20
Pneumonia,	6	Nervous exhaustion	36	Iritis,	10
Total,					602

The number and diseases of those who died were as follows:

Delirium Tremens,	6	Erysipelas,	1	Phthisis pulmonalis,	1
Typhoid fever,	1				
Total,					9

The number sent to the County Hospital was	19
Sent to the County Poor-House	16
Sent to the Small-Pox Hospital	4
Total,	39

The cases sent to the hospital were such as could not conveniently be treated in the institution, with its present accommodations, and those sent to the Poor-House were persons old and infirm, who were in bridewell under the charge of vagrancy.

On the whole, the sanitary condition of the institution during the past year has been good, and no diseases have prevailed excepting those caused by exposure and violence.

All of which is respectfully submitted.

N. T. QUALES, M.D.,
City Physician.

SMALL-POX

The following table shows the small-pox cases reported by wards and months:

WARDS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total.
January,	4	19	9	9	38	15	29	13	9	11	20	13	2	11	20	6	288
February,	7	26	18	20	66	10	18	12	11	5	19	4	2	10	12	7	247
March,	2	12	17	5	35	6	21	9	5	2	19	12	2	11	18	8	184
April,	3	14	7	14	13	6	11	8	4	3	5	11	3	6	12	10	130
May,	4	5	2	5	12	9	7	4	3	4	9	4	15	7	16	4	110
June,	7	9	7	1	5	1	...	...	2	1	4	2	2	3	6	4	54
July,	2	...	...	1	...	...	...	1	...	3	2	1	1	2	3	...	16
August,	...	...	...	1	...	...	...	...	...	...	...	...	...	2	...	...	3
September,	...	...	...	...	...	...	...	...	...	...	...	...	...	1	3	...	4
October,	...	...	1	...	...	...	7	...	...	1	...	...	...	...	1	...	10
November,	...	1	...	...	1	...	...	...	...	...	1	...	2	1	7	...	13
December,	...	...	...	...	...	...	2	1	...	2	...	...	4	1	...	...	10
Total,	29	36	61	56	170	47	95	48	37	29	79	47	33	55	98	39	1009

VARIOLOID.

The following table will show the varioloid cases reported by wards and months:

WARDS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total.
January,	3	12	...	6	19	5	11	4	3	3	6	2	...	9	2	4	89
February,	3	3	4	10	...	3	8	6	5	...	5	2	...	3	2	3	57
March,	6	1	3	3	8	7	3	7	1	1	3	1	...	1	1	1	48
April,	...	4	1	2	6	3	6	2	3	4	2	1	1	4	2	5	48
May,	1	4	2	1	3	1	4	...	1	1	...	...	3	3	1	1	24
June,	...	...	3	2	...	...	1	...	1	...	1	2	1	...	4	...	15
July,	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	2
August,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
September	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
October,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
November,	...	1	...	1	...	...	1	...	...	...	...	1	...	1	1	2	8
December,	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	2
Total,	13	25	13	25	36	19	34	20	14	9	17	9	6	23	13	16	292
Total of small-pox and varioloid cases,																	1301

NUMBER OF PATIENTS REMOVED TO THE SMALL-POX HOSPITAL.

January	46	June	30
February	64	July	4
March	46	August	3
April	36	September	2
May	41	October	8
		November	16
		December	2
		Total,	298

GRATUITOUS VACCINATIONS FOR 1868.

Dr. E. Powell 34	Dr. P. Adolphus 670	Dr. Geo. Schloetzer.....187
Dr. W. C. Lyman 168	Dr. Geo. Kellogg 35	Dr. J. Reid 170
Dr. J. M. Woodworth 100	Dr. W. R. Mulsh 350	Dr. D. B. Trimble..... 80
Dr. E. O. F. Roler 90	Dr. T. P. Seeley 100	Dr. N. T. Quales 313
Dr. M. Mannheimer....300	Dr. H. M. Lyman.....150	Sanitary superinten'nt 278
Dr. R. M. Lackey.....260	Dr. T. W. Miller.....125	
Dr. E. W. Lee 600		Total, ... 4010

During the year, 10,500 children were examined in private schools, and 4700 in public schools. Eight hundred and ten vaccine crusts were distributed.

INSPECTION OF IMMIGRANT TRAINS.

Number of immigrant trains inspected by sanitary inspectors and sanitary policemen of First, Second, Third, and Eleventh wards, were 210.

NUMBER OF IMMIGRANTS ARRIVED.

By Michigan Central railroad	26,873
By Michigan Southern railroad	24,500
By all other routes	26,000
Total.....	77,373

Number of immigrants, suffering with small-pox, removed from depots to small-pox hospital, were 48.

MEAT INSPECTION.

All meat and vegetable markets in the city are under constant inspection. During the year there were condemned:—330 carcasses of mutton; 35 carcasses of veal; 23 carcasses of pork; 16 carcasses of beef.

Cattle inspected at Union stock yards, from August 30th to December 31st, 1868.

INSPECTION OF CATTLE.

August.....	4,353	October	34,779	December	21,231
September.....	30,383	November.....	29,650	Total	120,396

Of these, 178 were condemned.

Three hundred and twenty cows, and many sows, with young, were prevented from being sold for consumption in this market.

No record of the sheep and hogs that were kept out of the market.

CATTLE INSPECTION AT SLAUGHTER-HOUSES.

In order to prevent the introduction of dressed meat into the market, during the prevalence of the "cattle disease," the internal organs of 16,800 cattle were examined. A record was kept of the weights of the livers and spleen of 9000 of these.

Seventy-three cattle, suffering from the Texas fever, were condemned.

Sixty-one cattle, injured and unfit for food, were condemned.

Post mortem examinations were made of 142 cattle that died of Texas fever.

DEATH FROM CHLOROFORM.—Dr. Van Buskirk, of Gorham, Ohio, was found dead in his bed a short time ago. His death was supposed to have been caused by the inhalation of chloroform when alone, to relieve a nervous headache.—*N. Y. Med. Record.*

Book Notices.

From Lindsay & Blakiston, Publishers, we have received, through the agency of S. C. Griggs & Co., of this city, the following works:—

The Physician's Dose and Symptom Book: Containing the Doses and Uses of all the Principal Articles of the Materia Medica, and Officinal Preparations; also, a Table of Weights and Measures; Rules to Proportion the Doses of Medicines; Common Abbreviations Used in Writing Prescriptions; Table of Poisons and Antidotes; Classification of the Materia Medica; Pharmaceutical Arrangement; Table of Symptomatology; Outlines of General Pathology and Therapeutics. By Joseph M. Wythes, A.M., M.D., Author of the "Microscopist," etc., etc. Eighth Edition. Philadelphia: Lindsay & Blakiston. 1868. Price $1.

The whole matter indicated by the above copious title is enclosed in a small duodecimo volume of 263 pages; designed for convenience as a pocket companion.

Pronouncing Medical Lexicon: Containing the Current Pronunciation and Definition of the Terms Used in Medicine and the Collateral Sciences. With Addendum: Containing the Abbreviations Used in Prescriptions, and List of Poisons and their Antidotes. By C. H. Cleveland, M.D. Philadelphia: Lindsay & Blakiston. 1869. Price $1.25.

This is the eleventh edition of the well known Cleveland's Pocket Dictionary; a duodecimo of 302 pages.

The Use of the Laryngoscope in Diseases of the Throat. With an Essay on Hoarseness, Loss of Voice, and Stridulous Breathing, in Relation to Nervo Muscular Affections of the Larynx. By Merrill McKenzie, M.D., London; M.P.C. P.; Physician to the Hospital for Diseases of the Throat; and Assistant-Physician, and Co-Lecturer on Physiology, at

the London Hospital. Second Edition. With Additions, and a Chapter on the Examinations of the Nasal Passages, by J. Solis Cohen, M.D., Author of "Inhalation: its Therapeutics and Practice," etc. With 2 Lithograph Plates and 51 Illustrations on Wood. Philadelphia: Lindsay & Blakiston. 1869. Price $3.00.

This is an elegantly published volume, octavo, of 289 pages; the paper, type, and illustrations, are all excellent. It is a book that should be in every physician's library.

On Chronic Bronchitis, especially as Connected with Gout, Emphysema, and Diseases of the Heart: Being Clinical Lectures delivered at the Middlesex Hospital. By E. Headlaw Greenhowe, M.D.; Fellow of Royal College of Physicians; Consulting Physician to the Western General Dispensary; Senior Assistant-Physician to the Middlesex Hospital. Philadelphia: Lindsay & Blakiston. 1869. Price $2.25.

This volume embraces eight Lectures on topics of great practical interest and importance. The first is devoted to a general consideration of the Etiology of Bronchitis, and its Relation to other Diseases; the second, to Bronchitis, from Mechanical Irritation; the third and fourth, to Gouty Bronchitis; the fifth and sixth, to Emphysema, and the Connection of Bronchitis with it; the seventh and eighth, to Bronchitis as Connected with the various Organic Diseases of the Heart. These several lectures are illustrated by over 40 clinical cases. The work is a valuable addition to the literature of bronchitis.

We have received from the publishing house of Williams Wood & Co., of New York, through the hands of S. C. Griggs & Co., of this city, the following works:—

Pathological Anatomy of the Female Sexual Organs. By Julius M. Klob, M.D., Professor at the University of Vienna. Translated from the German, by Joseph Kammerer, M.D., Physician to the German Hospital and Dispensary, New York, and Benjamin F. Dawson, M.D., Assistant to the Chair of Obstetrics, in the College of Physi-

cians and Surgeons, New York. New York: Williams Wood & Co., Publishers. 1868. 299 pages. Price $3.50.

This is a very valuable work, on a highly interesting subject. The translators and American publishers have executed their tasks in good style, and deserve the thanks of the profession.

Editorial.

Annual Meeting of the Illinois State Medical Society.—The next Annual Meeting of the Illinois State Medical Society will be held in Chicago, commencing on the *third Tuesday* in May, 1869. We expect a full and interesting meeting; and hope the profession, in every part of the State, will be represented.

American Medical Association.—The next Annual Meeting of the American Medical Association will be held in New Orleans, on the *first Tuesday* in May, 1869. As this is the first meeting in the South for several years, it is very desirable that it should be well attended. A full delegation from the Northwest will be most cordially received by the Profession in New Orleans, and will do much, not only to advance the strictly professional and scientific interests of all sections, but will also aid in completing the restoration of cordial feelings of brotherhood throughout the land.

Spring and Summer Medical Instruction in Chicago.—The Rush Medical College closes its usual short Annual Term on Wednesday, February 3d (before this number of the Examiner will reach its readers), by the ordinary exercises of public commencement, and a meeting of its Alumni. By a circular that accompanies this number of the Examiner, it will be seen that arrangements have been made for a Spring Term of instruction, in connection with that College, extending from

March to July. The instruction to be given in the Spring Course is to be mostly by Young Men of talent and enterprise, not members of the Faculty of the Rush College, but connected with the Public Hospitals and Dispensaries of the City. For details, see the circular.

The regular Annual Lecture Term of the Chicago Medical College does not close until the *fourth Tuesday* in March. A Summer Course of instruction, commencing on the first Monday in April, and ending on the first of July, constitutes a permanent part of the organization of this College; and is free to all medical students who become regular Matriculants of this College. It will be seen that no City in the Country affords better facilities for the study of Medicine, in all its departments, both Winter and Summer, than Chicago.

Honorary Degrees.—We see it stated in the daily papers, that "the Faculty of Lake Forest University, at a recent meeting, conferred the honorary degree, Professor of Ophthalmic and Aural Science, upon Dr. J. S. Hildreth, of this city." This seems to be a novel "*Degree.*" We had supposed that a professorship involved an appointment, either active or honorary, in some institution. But this action of the Board of Trustees (not Faculty, for it has none) of Lake Forest University seems to confer a professorship on a gentleman, not only without an appointment, but without any such chair in the institution.

Money Receipts to Jan. 21, 1869.—Drs. W. H. Baxter, $1; James Miner, 3; J. Quirck, 6; Thos. S. Parr, 3; O. W. Sadler, 3; J. R. Flood, 3; C. G. Reim, 3; S. M. Pegram, 6; J. W. Barlow, 9; Henry Jones, 1; J. Woodworth, 2; Geo. McPherson, 6; J. F. Hopkins, 6; R. S. Lewis, 3; E. P. Cook, 3; Elmer, F. Clapp, 3; David Newell, 6; Asahel Clark, 3; A. S. Holland, 6; L. D. Payne, 4.75; J. S. Lawrence, 1; P. Eppler, 4; C. K. Clark, 3; J. P. Johnston, 3; V. Clarence Price, 3; I. N. Bishop, 5; G. S. Thomas, 3; W. H. Price, 3; W. W. Bonnell, 6; G. H. Fuller, 1.50; Levi Day, 3; A. Grættinger, 6; W. L. Kreider, 3; H. C. Miner, 6; D. J. Hussey, 4; M. W. Seaman, 5; Wm. Martin, 1.25; P. M. Cleary, 4, E. V. Dale, 3; Wood & Curtiss, 3; E. Andrews, 5; Thos. A. Clark, 6; Lyman J. Barrows, 3.25; Wm. F. Cady, 5; E. B. Wolcott, 6; C. Shumway, 6; Aug. Rhoads, 3; D. O. Crist, 2.50; H. K. Deene, 5; T. D. Fisher, 3; W. J. Johnson, 6; F. K. Bailey, 1; L. Tibbets, 2; A. M. Maxwell, 3.

VICK'S FLORAL GUIDE FOR 1869.—The first edition of one hundred thousand of Vick's illustrated catalogue of seeds and guide in the flower garden is now published. It makes a work of 100 pages, beautifully illustrated, with about 150 Fine wood engravings of flowers and vegetables, and an elegant colored plate, a boquet of flowers.

It is the most beautiful, as well as the most instructive Floral Guide published, giving plain and thorough directions for the culture of flowers and vegetables.

The Floral Guide is published for the benefit of my customers, to whom it is sent free without application, but will be forwarded to all who apply by mail, for Ten Cents, which is not half the cost. Address JAMES VICK, Rochester, N.Y.

BELLEVUE PLACE,

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Jan. 1, 1869. **Batavia, Ill.**

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Pharmaceutical Preparations,

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CHICAGO MEDICAL COLLEGE.

The regular Annual Lecture Term in this Institution will commence on the first Monday in October, and continue until the fourth Tuesday in March following. Clinical Lectures *daily* throughout the term.

FACULTY.

N. S. DAVIS, M.D., PRES'T OF FACULTY, 166 State Street,
Professor of Principles and Practice of Medicine and of Clinical Medicine.

W. H. BYFORD, M.D., TREAS. OF FACULTY, 62 State St.,
Professor of Obstetrics and Diseases of Women and Children.

EDMUND ANDREWS, M.D., SEC'Y OF FACULTY,
81 Monroe Street,
Professor of Principles and Practice of Surgery and of Military Surgery.

H. A. JOHNSON, M.D., 611 Wabash Avenue,
Professor of Diseases of Respiratory and Circulatory Organs.

C. GILBERT WHEELER, B.S.,
Professor of Organic Chemistry and Toxicology.

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Professor of Surgical Anatomy and Operations of Surgery.

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THE

CHICAGO MEDICAL EXAMINER.

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Original Contributions.

ARTICLE XI.

"IS THE PROTECTIVE POWER OF VACCINATION AFFECTED BY THE LAPSE OF TIME?"

BY F. K. BAILEY, M.D., Knoxville, Tennessee.

The above question is made the subject of a clinical lecture by Graily Newell, M.D., at St. Mary's Hospital Medical School.

My attention was directed to it in looking over the EXAMINER for November, 1863, where the lecture is copied from the *Lancet* of June 13th, 1863. This is a question which should deeply interest not only every medical man, but also all men and women who wish for themselves or their children to retain a face unspotted, or rather unpitted.

I well remember, when a child, that a man in our village had small-pox. He had taken it the "*natural way*," and, as generally is the case, died. At dead of night he was buried, and his only attendants to the grave were some of his neighbors who had had small-pox. At that time I was vaccinated; and "it worked finely;" leaving a scar, which, in after-life, was considered an indication of immunity from the terrible malady. How much it proved a protection, the sequel of this communication will tell. Very singularly, I had lived to be nearly 40 years of age, without being near enough to a case of small-pox

to be exposed. Meanwhile, I had at various times introduced virus to my own arm, while vaccinating others, but without effect, except the itching known to all.

In December, 1862, while in charge of a division of the U. S. General Hospital at Quincy, Illinois, a private, belonging to the 4th Minnesota Infantry, on duty as cook, contracted small-pox. As soon as it was known that we had this disease in our wards, every one in the hospital was vaccinated, myself among the rest. The patient died on the 16th, and about the same time I was taken suddenly, and severely, sick. There was headache, and pain in the lumbar region, with a most inexcusable vomiting, which sedatives and correctives failed to allay. There was the horrible cold stage, followed with terrible heat of surface, and, in fine, all the commonly-described symptoms of variola. Still, it could not be small-pox, if vaccination, and revaccination, oft repeated, had been of any avail.

But, after more than forty-eight hours of suffering more intense than I had ever before endured, a profuse sweating commenced, accompanied by a very welcome relief from distress. On putting my hand to the edge of the hairs about the forehead, and upon the face, there were to be felt minute points, like as if small shot were imbedded in the dermis. In fact, I had varioloid most firmly developed. *Here* was a case, involving the question now under consideration. Enough had been endured to render it personally interesting. Fortunately, no other cases of either variola or varioloid occurred at this time.

There were some exposed at the time, who never had been vaccinated, as will be seen in the following. From notes now in my possession, there were then in the division seventy-one persons, who had been more or less exposed to the contagion.

Of this number, ten gave no evidence of having been vaccinated. There were no scars to be found upon their arms, nor could they remember that it had ever been attempted.

Four had had small-pox. Forty-five had been vaccinated before puberty, and twelve subsequent to that period. The ten unprotected persons were vaccinated, as stated above, with successful results.

Of the revaccinations, forty-eight were unsuccessful, and ten successful; one of which was upon a person who had had small-pox. By a successful revaccination is meant, a case where a scar could be found, but all the phenomena as seen in genuine original vaccination, were noticed. It is noted, also, that among the whole seventy-one individuals, there were three who had had varioloid, but they stated that they were vaccinated in early life.

During the winter of '62 and '63, no patients were sent to my division till February. The following is a copy of the report made at the end of the month:—

Whole No. of patients,	106
Number who gave no evidence of having been vaccinated,	17
" " had been vaccinated before,	89
" " had had small-pox,	8
" of revaccinations successful,	25
" " vaccinations do.,	8
" successfully revaccinated who had had small-pox,	3

Nine (9) of the seventeen reported as unprotected, in whom vaccination was not successful, were subsequently carefully revaccinated, but of the result no record is at hand. A portion of them might have once been successfully vaccinated, and the evidence by scar might have been upon the lower limbs, as the arms only were examined. No cases occurred till the next December, although patients were constantly arriving. Vaccination and revaccination were carefully attended to, and monthly reports of results made, but no copies were preserved, to which reference can now be made.

On December 2d, about fifty patients were admitted, mostly from Nashville, Tennessee. Many of them had been vaccinated at different hospitals South; and some even had crusts upon the arms, not sufficiently mature to be removed.

But the orders were, that the operation should be repeated in all cases of admission, without exception, and regardless of what had been done previously. In one case, there was a crust upon the arm, and the soldier very naturally objected to the

annoyance, but yielded, because it was the "*order.*" Virus was carefully inserted in the arm, near to the scab so nearly matured, and nothing more thought of the case, till in a few days he was taken with characteristic symptoms of variolous disease, followed, in due time, by a fine crop of eruption. He was at once sent to small-pox hospital, and the case proved to be one of unmodified small-pox. The eruption became umbilicated, and pits were left upon the face.

In another case, a soldier belonging to the 125th Illinois, was admitted December 2d, and, with the others, was revaccinated. Upon his arm was a large and distinctly-formed scar, and I inserted the virus upon each side of the original scar. The vaccination worked finely, and scabs formed at each point. After the crusts had begun to dry, and were nearly ready to separate, he was taken with small-pox in a very violent form, and died January 8th.

During the month of December, there were a great many cases of varioloid, characterized by febrile symptoms, and a slight eruption, but of undoubted genuineness.

Among those were many I had vaccinated and revaccinated at former periods, and it seemed evident that they were protected from the influence of contagion.

The mild cases, that required no nursing from others, were merely transferred to the fourth-story ward of the building; and as many as twenty were in that room at one time.

They were isolated merely long enough for the vesicles to dry, which seldom required more than a week or ten days. During the intense cold weather in January, 1864, the variolous disease was very malignant, and seemed determined to become general; and no one felt secure, because so many were affected who were supposed to be well protected. The young man who was detailed as prescription clerk in the dispensary had well-developed varioloid, although the virus had been inserted in his arm at several different times.

At this period, unmodified variola also prevailed in the four or five divisions of the General Hospital, as well as among the people in the city. I will mention another case, showing the

potency of contagion under certain circumstances. A corporal belonging to Company "I," 72d Illinois, was a convalescent in hospital, and had been in the wards as nurse for some months. In the notes of vaccination, it is stated that he was vaccinated at the age of 15, and revaccinated twice before coming under my care. The operation was repeated by myself on his admission, with all the others, and was considered as exempt from contagion as he could well be.

Among the patients was a young man who had lost an arm, and the corporal, having the care of dressing the stump, had formed a strong attachment to him. Some time in January the young man was taken with characteristic symptoms, which proved to be a severe case of modified small-pox.

When he was sent to small-pox hospital, the corporal volunteered to accompany him as a special nurse. I objected to his going, for the reason that none were sent as nurses, except those who had had small-pox, or varioloid. But, as he had been so much exposed to severe cases that had occurred at different periods in the same ward, it was thought that he would be safe; and, as he assumed all the responsibility in case he should contract the disease, he was allowed to accompany his young comrade.

The room to which they were assigned at the pest-house was one in which a man was recovering from the disease in a severe form, and the corporal staid with both of them, night and day.

In twelve days the corporal was attacked, and had the characteristic symptoms in a severe form. The eruption came out very thickly, and the case was one of well-developed modified small-pox.

This, we see, was an instance where the person had withstood the contagion in a less degree of intensity for some time, but succumbed after remaining constantly in a room with the disease. The corporal soon recovered; and it would seem that he could, after such an experience, be considered exempt, if any one ever could. During this period, there were three or four cases of well-developed varioloid in persons whose faces

were already pitted, and had, as well as all the rest, been revaccinated under the general order. When a Teuton or a Celt, who, in the Old Country, had had small-pox from inoculation, became subjects of varioloid, our faith in such a thing as immunity was considerably shaken. Late reports from California state that serious doubts are entertained upon this subject in that region. One thing is very conclusively shown, which is, that epidemic influence will, in this disease now under consideration, as well as some others, render all rules and laws liable to exceptions.

It is very evident that people generally are becoming thoughtlessly indifferent to vaccination in their families. We frequently hear, when it is suggested to a mother that her children should be vaccinated, the exclamation, "Why! is the small-pox about?" When informed that it is not, but liable to occur at any time, she will say, "Then I will wait, for I don't want the little thing to be sick."

The late war found great numbers of men who stated that they were vaccinated in childhood, "but that it did not work," and the operation was never repeated. But very few had been revaccinated, and consequently, in cases where the original operation, although successful, had "run out," they were fit subjects for variola, especially when prevailing as an epidemic. Had they remained at home in their rural neighborhoods, they might never have been exposed.

One reason of the indifference of people upon the subject of being protected from variolous contagion is, that but few have ever seen a case of small-pox. One walk through the rooms of a "*Pest-House*" (which every one, of all things, will avoid) would suffice to cause alarm, and awake attention to vaccination.

In conclusion, then, it may be remarked, that even if vaccination is not an absolute immunity from variola, still, the disease is so much modified, that fatal results seldom follow.

The case mentioned above, of the soldier in the 125th Illinois, is the only exception, in some hundreds of individuals, during an observation extending over a period of nearly three years.

As a result of these observations, it is clear, that if every person could be vaccinated in infancy, revaccinated at the age of puberty, and at the age of twenty-one, there will be a degree of immunity as nearly absolute as can be conceived.

But, while one can have varioloid without serious results to himself, still, the mildest form is capable of communicating to an unprotected person the disease in an unmodified and fatal type. The above observations are given, in the main, from facts only deduced from memory. If access could be had to official reports made from month to month, many more cases might be presented of a similar nature.

Others may have observed the same facts; but, if so, they have not given publicity to the results of their observations.

ARTICLE XII.

CHLOROFORM IN INTERMITTENT FEVER.

BY D. SCOTT, M.D., Bellefontaine, Iowa.

N. S. DAVIS, M.D.: *Dear Sir:*—I beg leave to add a little more testimony on the use of chloroform as an internal remedy.

To Dr. A. P. Merrill, of New York, is due the credit of the discovery of this property of chloroform; although the medical journals, in their notice of my report on its use in the chill of intermittent fever, gave the credit to Dr. McClellan, who, certainly, has no more claim to originality in the use of the remedy than myself. I regard its discovery as a matter of no mean importance; on the contrary, I believe it to be second only to its original discovery as an anæsthetic. In support of Dr. Merrill's claims to priority in its use, I would beg leave to refer you to his published Lectures on Fever, delivered in the Memphis Medical College, in 1853–6, from which I make the following quotation, page 58:—"Chloroform, in doses of a fluid drachm, more or less, and repeated as its effects subside, will accomplish, in most cases, all that can be expected of opium, in regard to the nervous system, and without the objectionable

features of the opium practice. * * * I have known the chill of an intermittent to be relieved by it more promptly and effectually than by any other remedy; moderating, also, the stage of reaction to an extent which rendered it almost imperceptible; thus placing the patient, with little loss of time, in a condition to receive proper treatment for the period of intermission. * * * No risk of fatal or injurious effects is incurred by the use of chloroform in drachm doses; but it must be borne in mind, that its effects are much less permanent and lasting than those of opium; a frequent repetition of the dose being necessary to a prolonged influence of the remedy." It is also mentioned on pages 81, 136, 169, 191, 193, 209, 230. It was not until after the perusal of the Doctor's report on the use of chloroform as an internal remedy, written for the International Medical Congress, that I became aware that the range of its application was so extended; since which time, I have used it in a variety of pathological conditions, such as infantile convulsions, puerperal convulsions, uterine hemorrhage (*post partum*), spasm of the stomach, colic, etc.

The following cases I desire to report in detail:—

Case I. On the 8th of July, 1868, I was hastily summoned to see a lady, 44 years of age, whom, six hours previously, I had delivered of a dead child, at full term: the case having been one of placenta prævia, I had turned and delivered, with little trouble to myself or patient, and left her, two hours afterwards, apparently comfortable and cheerful—but the messenger said she was dying; and, when I reached her, a few minutes later, I feared it was but too true. She was just emerging from a convulsion—the twelfth, the attendants informed me—there she lay, cold and cadaverous, bloody foam issuing from the mouth, respiration stertorous, and no pulse perceptible at the wrist; the jaws were spasmodically closed; I opened them, however, with some difficulty; and, in this dire extremity, I unhesitatingly poured half an ounce of undiluted chloroform into her mouth; which was immediately swallowed. In ten minutes the stertorous breathing ceased, the pulse came up full and bounding, and the patient was sleeping as easily and naturally as

though enjoying the most healthful slumber. This continued for a period of about two hours, when she awoke perfectly conscious; but, with some confusion of mind, she made a slow but good recovery.

That the recovery, in this case, was due to the remedy, we may reasonably conclude, when we take into consideration the exhausted condition of the patient from flooding, etc., together with the severity and persistence of the paroxysms. Whether the remedy had ever been used previously in such condition, I am not advised; but, so favorably am I impressed with its efficacy, that whenever I am so unfortunate as to meet with such cases, I shall not hesitate to use it in heroic doses.

CASE II. On the 20th August, 1868, I was hastily summoned to see a young woman who had ignorantly swallowed a quantity of strychnine, which quantity I could not exactly ascertain. I found her in great distress, having suffered repeated convulsions. I administered a teaspoonful of chloroform, which afforded considerable relief; but, no tendency to sleep, in fifteen minutes I repeated the dose; and, in a short time, she was sleeping very comfortably, and continued so for about one hour: she had no return of the symptoms, and no subsequent treatment.

Doubtless, the latter case develops nothing new, from the fact that Dr. Dresbach, of Tiffin, Ohio, reported a case of recovery, under similar treatment, a number of years ago.

ARTICLE XIII.

LITHOTOMY—SEMILUNAR EXTERNAL INCISION.

BY JAMES T. NEWMAN, M.D., Chicago, Illinois.

Was consulted by G. H., September 9th, 1868, who stated to me that he had great difficulty in passing his urine. Oftentimes, when in the act of micturition, the stream would flow freely; then, all at once, it would stop suddenly; at other times it would start, and he could not control it. There was great pain in passing the fæces; there was also a constant dull pain

at the neck of the bladder, together with a sense of weight, or pressure, at the lower part of the pelvis. His urine was high-colored, and often mixed with blood. He begged of me, for God's sake, to give him something to relieve him; at the same time, asked me what was the matter? I was not prepared to give him an answer so soon—putting all these symptoms together, told him nothing more than that there was an urinary disease of some kind, of which, I could not determine at the present time; well knowing that they might be considered diagnostic of enlargement of the prostate, or irritation of the neck of the bladder. Sometimes, where there is a tumor hanging by a small pedicle, it will give rise to symptoms similar to those mentioned.

We will now take those disorders up, and examine them, *seriatim*. An enlarged prostate gland is attended with symptoms similar to those of a stone; with this difference, that the motion of a carriage does not increase the pain when the prostate is diseased; while, in a case of stone, the patient suffers the most excruciating pain. It also generally happens that the fits of stone come on at intervals, whereas the pain from an affected prostate is neither so unequal nor acute. When there is inflammation of the neck of the bladder, the parts become tumefied; hence the obstruction to the urinary jet, which gives rise to the conditions so often mistaken for those of stone.

These thoughts that I have here tabulated flew through my mind quicker than it takes to write them. I, however, told him that I considered his case to be one of a very grave nature, but would give him all the relief in my power, but would have to subject him to an examination, or, in other words, sound him. He very readily consented. I placed him in proper position, and took a small beaked sound and commenced exploring the urethra and bladder: he fainted, but I threw some water in his face, which soon revived him, and continued my exploration. It was not long before the sound struck upon a hard body, and gave forth the well-known click. I now was no longer in doubt about what was the matter, and advised

an operation, to which he at once consented. I told him I had never performed the operation. He expressed confidence in me, and that I might just as well commence on him as any other person. I must confess that the man startled me with the coolness he manifested, and, at the same time, my vanity was somewhat flattered; being anxious to record my name amongst surgeons that have performed this brilliant operation. I resolved to undertake it; but, after having made every preparation myself, confidence was taken down when I remembered that some poet had said, that "fools rush in, and stand where angels fear to tread;" but, thus far I was committed, and there was no backing out. Dr. W. H. Horn kindly promised to assist me; and, on the 20th of September, 1868, at 10 o'clock in the morning, we commenced to operate. The patient was properly secured, and put under the influence of chloroform. I passed a rectangular grooved staff into the bladder: the stone was immediately felt. I proceeded to make a transverse, crescentic incision in the perineum, after the manner of Erichsen: the centre of the incision was half an inch above the anus, and each extremity of it about one-half inch from the tuber ischii. I cut down, in the line of the superficial incision, to the central part of the perineum, in order that I might separate the bulbous portions from the rectum. I now directed the knife into the groove of the staff, through the membranous urethra, and just in front of the prostate. Its blade being directed upwards, the knife was now drawn backwards, cutting upwards, so as to form a vertical incision in the superficial surface, about one inch in length in the middle line, commencing with the original crescentic incision. Having laid aside the knife, a lithotomy caché was introduced along the groove of the staff; and, by the withdrawal of this, both lateral lobes of the prostate were divided to the extent of about three-fourths of an inch. The lithotomy forceps were introduced; and, by dexterous manipulation, the stone was seized and withdrawn. The calculus was phosphatic; in form, an oblate spheroid; its transverse diameter, 3.75 inches; its conjugate, 1.45 inches. He bore the shock well; expressed himself greatly relieved; recovered rapidly; and, on the 10th

of October, the urine ceased to flow through the wound, and passed through the natural passage: it soon afterwards healed up, and, at this time, he is in perfect health.

ARTICLE XIV.

OPERATION FOR OVARIAN DROPSY.

By THOMAS P. RUSSELL, M.D.
With Subsequent Treatment, By J. F. KELSEY, M.D.

Mrs. D., of Royalton, Wisconsin, aged 25 years, has had two children; the youngest born August, 1866. Her getting up from confinement was about six weeks, followed by the development of a tumor in the right inguinal region. I saw her first in November, 1867: laboring under an inflammation of the peritoneum, in consequence of the tumor, which had already reached the region of the stomach. Saw her again at Chicago, March 1st, 1868, in consultation with Drs. E. O. F. Roler and E. Andrews, Professor of Obstetrics and Surgery in the Chicago Medical College, who pronounced it multilocular ovarian dropsy, and told her, the only means of relief was in the removal of the tumor. She, not being prepared to be operated on, went back to her home in Wisconsin. Saw her again at her residence, December 14th, with Drs. Russell and Linde, of Oshkosh: found her much emaciated in flesh and strength; measuring 45 inches around the abdomen; had retained but little food and drink for six weeks past; vomiting from 1 to 4 times during the 24 hours; and very anxious for relief. She was told by Dr. Russell that she stood about 1 chance in 10 to live, in case of operation, and advised to take that chance; and, by her consent, would operate the next day, which was done, with the assistance, and in the presence, of Drs. Linde, Dickinson, Reiley, H. A. Frost, G. M. A. Brown, and J. F. Kelsey. An incision was made in the linea alba, about five inches in length from the navel downward; with an escape of considerable peritoneal fluid; exposing a large cyst, which was evacuated, followed by

another and another, until several were evacuated, of as many colored syrupy tenaceous liquids as there were cysts. The tumor, much reduced, exposed a large, semi-solid cyst on the right side, with firm and extensive adhesions to the peritoneum, which could not be reduced. The wound was enlarged about 4 inches, directly upward: adhesions gave way, under pretty smart force, exerted for that purpose, with the fingers. The tumor turned out the pedicles; three of them, one large and two small ones, were secured with large double silk ligatures, and severed, betwixt them and the tumor, with the knife, and transfixed in the wound, at two separate places, nearly two inches apart, irrespective of their origin, the two small ones together in the lower part of the wound. The wound was then closed with silver sutures; and one steel pin passing through the edge of the wound, and small pedicle to keep it upon a level with the abdomen, it being cut a little short (they were plenty long before separating); the large one left sticking half an inch out of the wound, which was dressed with carbolic acid cerate, and bandaged with a broad flannel roller. She was then put to bed, having been under chloroform 2½ hours; the operation occupying 2 hours. The tumor and its contents weighed 40 lbs.

December 15th.—Operation concluded at 1.30 o'clock, p.m.: patient in a great deal of pain; pulse, 130 per minute, feeble; respiration, 21: gave morphine, gr. ss. 2 p.m.: gave opium, gr. j., with ½ gr. morphine. 2.30 p.m.: very restless, with severe pain: gave tincture opium, gtts. 40. 3.30 p.m.: considerable pain; pulse, 120, feeble: gave opium, gr. j. 6 p.m.: inclines to sleep; thirsty; drinks ice-water freely: gave tincture opium, gtts. 40. 9 p.m.: pulse, 120; respiration, 21; use catheter; feels a little better: gave opium, gr. j. 11.30 p.m.: gave tincture opium, gtts. 40. *16th*—12.30 a.m.: more restless, with pain; pulse, 130; tongue coated with a brown fur, dry and swollen: gave opium, gr. j. 1.30 a.m.: gave opium, gr. j. 2.30 a.m.: has slept a little; pulse, 120; respiration, 20; says she feels some better; inclined to be wakeful: gave tincture opium, ½ teaspoonful. 7 a.m.: complains of smarting pain at seat of wound; pulse, 120; respiration, 18; use catheter;

wants to be turned in bed often, which has been done gently, to her satisfaction: gave opium, gr. jss., and ordered ½ teaspoonful tincture opium to be taken every three hours. 4.30 p.m.: pulse, 120; respiration, 12; tongue moist; skin cool; voids urine herself; takes a little crust coffee, and feels quite comfortable. 9 p.m.: complains of nausea, with pain in the bowels; tenderness; pulse, 130 per minute, feeble; has voided urine 3 times since 5 o'clock: gave, in addition, opium, gr. ij. 11 p.m.: feels a little better: gave opium, gr. jss. 11.45: vomits a little water: gave sub-nit. bismuth, gr. 20; tincture opium continued. *17th*—11.30 a.m.: has vomited once; her flannels were changed yesterday, and again to-day, with considerable discharge of fetid, bloody serum from the wound; the tongue is coated with a dry, brown fur, with moist edge; lips parched, with considerable sordes on the teeth; pulse, 120; respiration, 12; is quite free from pain; takes a little beef-tea. 4.30 p.m.: nauseated to the stomach: gave sub-nit. bismuth, gr. 20, which relieved it. *18th*—11.30 a.m.: just dressed the wound for the first time; abdomen tender and slightly tumefied; great soreness in the right side, and very thirsty: tincture opium with beef-tea continued. *19th*—11 a.m.: the decomposition of the stump smells very bad, sickening her at the stomach. 10 p.m.: skin cool; tongue moist, with white fur; pulse, 120; tenderness of the abdomen increased, treatment the same. *20th*—3 a.m.: patient very restless, with flatulence of the bowels: gave an enema of permanganate of potass, gr. ij.; aqua, oj., which procured two good evacuations and relieved her. 12.30 p.m.: have just dressed the wound; less soreness; the large stump puffing out of the wound, the bigness of a man's fist; gangrenous. So far, she exceeds our most sanguine expectation towards a recovery. 11 p.m.: a little nausea: gave bismuth, gr. 20: feels a disagreeable sensation in the bowels: gave an enema of permang. of potass, gr. j.; aqua, oj.; retained, and patient feels better. *21st*—3 p.m.: just removed a large amount of dead tissue from the stump; treatment the same. *23d*—4 p.m.: wound some inflamed, with fulness of the bowels; otherwise cheerful: gave an enema of permanganate of potass; retained; takes

tincture opium, in ½-teaspoonful doses, every 4 hours. *24th*—9 a.m.: considerable discharge of pus; bowels more flatulent; remove one suture, for the first, and syringe the wound with dilute carbolic acid. 3 p.m.: gave an enema of oleum terebinth., ℥j.; oleum ricini, ℥j.; starch, oj.; retained. 8.50 p.m.: bowels largely distended: gave another of soap-suds, ojss.; retained. 10.15 p.m.: another of soap, salt, and molasses; retained. 11 p.m.: another of permanganate of potass, gr. ij.; aqua, oj., which operated, discharging some flatus; vomited again, and took bismuth, sub-nit., gr. 15, immediately after, with considerable relief; tincture opium continued as before. *25th*—7 a.m.: bowels still flatulent: gave another enema of permang. potass; retained. 9 a.m.: another of the same, which operated with considerable relief. 6 p.m.: gave another enema of permang. potass; retained. 6.45 p.m.: gave another of the same, which operated. *26th*—8 a.m.: bowels still flatulent: ordered the following solution, ¼ teaspoonful to be taken every 6 hours:—Strychnia, gr. j.; nitric acid, gtts. 30; aqua, ℥ij.; alternated with ¼-teaspoonful of laudanum, if the patient should have any pain. *27th:*—She took an enema of the permanganate last night; operated nicely; bowels but slightly flatulent; removed nearly all the remaining dead tissue from the large stump; wound discharging freely; appetite increasing; patient cheerful. The temperature of the room was kept the first week ranging from 57 to 60 degrees (Fahrenheit), and well ventilated; since then, still lower. *January 2d, 1869:*—removed the sutures and pin to-day; wound looks well; patient improving; is still taking the strychnine solution, as before.

MICROSCOPICAL EXAMINATION OF A HEALTHY OVARY.—It is found, by M. Sappey, that the number of ovisacs and ovules contained in one healthy ovary amounts to more than 300,000; consequently, the individual would have about 700,000. He calculates that if all the ova found on the surface of the ovaries of a young woman, eighteen or twenty years of age, were to be fecundated, one woman only would be required to populate four such cities as Lyons, Rouen, Marseilles, and Bordeaux; two women only would be necessary to furnish inhabitants for a city of 1,600,000 persons.—*N. Y. Med. Record.*

Foreign Correspondence.

VIENNA, *December 25th, 1868.*

DEAR EXAMINER:—I once met a man travelling through the State of Illinois in search of pine forests. He had found a few scattered trees on the banks of some of its streams; and was so encouraged that he continued his search. Not less amusing or humiliating is it to find comparatively intelligent American physicians in Europe studying particular branches of medicine, in cities where these branches are poorly taught and illustrated. For instance, one meets Americans in Wurtzburg paying especial attention to skin disease, where but little is found; instead of going to Hardee, at Paris, or Hebra, in this city, who have the most abundant material. Others stop a year at Heidelberg, to learn midwifery, when they could, perhaps, see more at Prague in a month: while many others cross the sea and study topics they had far better learn at home.

European students often think we are entirely ignorant of their institutions; and often, not without just reason. I was told in America that I would be allowed here to make all the operations in midwifery, and perform many important operations in surgery. On the contrary, I am permitted to make no considerable operation in the latter, and only to apply the forceps in the former.

I have thought that, perhaps, I might communicate something, both to those of your readers who may chance to visit Europe, for the purpose of study, and for the intelligence of those who remain at home, on Vienna as a place for the study of medicine; which might be of more benefit for the present than the detail of special cases; not intending, however, to compare this with other European hospitals or schools, but to state, in a simple manner, what opportunities the student may find here; leaving it for the reader to make the comparison with what he may know of other places. It is scarcely necessary that I should speak of the medical faculty. The names of Skoda,

Rokitansky, Sigmund, Hebra, Oppolzer, etc., are familiar to every medical scholar. I may hereafter speak of their treatment of special cases; which will better illustrate the worth of the men than anything I can otherwise say of them.

The Allgemeineu Kraukenham (General Hospital) has, at present, somewhat over two thousand patients in its wards; while between one and two hundred out-patients visit its clinics daily. The hospital building is in the form of a hollow square, with cross-sections, which divide the square into nine or ten smaller courts; so that only a minute or two is necessary to go from one clinic to another; which are so arranged, in regard to time, that one is enabled to attend from six to ten clinics daily.

I shall first speak of the department of obstetrics and diseases of women, and how they are studied. About 10,000 women are delivered in the two lying-in wards annually. In one of these wards the material is used by Professor Späth, for the instruction of midwives; the other is accessible to students of general medicine, male and female. Adjoining the ward is an amphitheatre, where Professor Braun delivers a clinical lecture, five times a week. Difficult cases are brought in, and delivered, on the table before the class, by the forceps, version, craniotomy, etc., as the case may require. Students are sometimes called upon to apply the forceps. I may here state that a female student (Russian), though strong and vigorous, has been entirely unable, through want of strength, in one or two cases, not very difficult, to extract with the forceps—if it be any argument against female practitioners? Women demanding surgical treatment are also operated on before the class. After the clinic, we often visit, for a few minutes, the gynæcological ward, of fourteen beds, and see a little of the treatment of female disease. Twelve students of the class are allowed to remain in the ward every twenty-four hours, and deliver normal cases, under the direction of the midwives; and those who have taken private courses in operative midwifery, of either of the Assistants, are often allowed to apply the forceps, and make traction, under the direction of an Assistant or the Professor; but to make no

other operation. Neither students nor midwives are allowed to make any operation without the presence of an Assistant or Professor, however urgent the case. This results in some evil as well as good. I've seen some cases lie for two hours, and finally result in eclampsia, because no Assistant could be found, and no student or graduated physician allowed to make some simple operation, as applying the forceps, which might have avoided this terrible calamity.

Private courses of operative midwifery are given by the Assistants, Drs. Rokitansky, Jr., and Mayerhofer, in which each student may make all operations on the cadaver of mother and child. Only those who have taken this course are allowed to apply the forceps in the ward.

On four evenings of the week, pregnant women, desiring to enter the lying-in room, are examined for admission. Those who have passed the seventh month are admitted. Students who wish are allowed to examine these cases, by palpation, and per vaginam, to determine the position of the fœtus, stage of pregnancy, condition of the organs, etc. We have no instruction in this, except the casual remarks made by the Assistant, as he passes from one case to another. The number of cases varies from one to ten; generally five or six. The other three evenings they are examined in Professor Späth's wards, to which, as I've before remarked, we are not admitted.

Although there appears to be abundant material to illustrate the diseases of women, over forty cases, yet there is no special Professor to illustrate this department. With the exception of the few cases in Professor Braun's ward, above mentioned, this department is in charge of a hospital physician, not professor, whose assistant gives private courses to classes of ten, in diagnosis and treatment of female diseases. Each student is allowed to examine cases, and give his diagnosis, which is confirmed or corrected according to circumstances; also, to introduce sound, catheter, and speculum. Our instruction, however, is not the most scientific or professional; and, I should judge, the student would be far more successful in practice by following the instruction of Byford or Thomas, in these cases, than by adhering

to precepts here received. In this private course I've seen no pessaries used, or operation performed for the displacement of the uterus. Uterine and vaginal discharges are not carefully distinguished and classified; hence, probably, not the most successfully treated.

I may add, that patients are generally removed from the lying-in wards from one to three hours after delivery, and are seldom bandaged. Cases of eclampsia are treated with large doses of morphine; rarely bled, or given chloroform. Medicine is rarely used to prevent secretion of milk. They claim equally good results, in both these departments, with other hospitals; but, if I mistake not, it depends largely on the class of patients, many of whom are sturdy peasants from the country, and can scarcely be compared with the hospital patients of Chicago, much less with those of private practice.

I shall endeavor to present some statistics of the hospital, on these points, at a subsequent writing. F.

Proceedings of Societies.

CHICAGO MEDICAL SOCIETY.

FRIDAY EVENING, Jan. 15, 1869.

The Society was called to order, President Marguerat in the chair.

Secretary Macdonald then read the proceedings of the last meeting, which were duly approved, and ordered to be placed on file.

The Society next proceeded to the discussion of "the therapeutical action and value of mercury and its preparations."

Dr. Loverin opened the discussion, by reading an interesting history of the mineral, where obtained; its different preparations, and modes of preparing them. Entered into the therapeutical uses of the most common preparations, including hydrargyri chloridum mite; hydrargyri bichloridum; hydrargyri

ammoniatum; hydrargyri iodidum; hydrargyri biniodidum; unguentum hydrargyri nitrico-oxidi; together with the strong and mild preparations of unguentum hydrargyri.

Dr. Loverin believes mercury very useful in æsthenic inflammations.

Dr. Bevan says that for the past four or five years he has been in the habit of treating acne with an ointment containing of hydr. biniodidi g. iij. to vij. to ℥j. of lard. Says that 5 grs. to the ounce will sometimes produce vesication. In some cases, where treatment was continued from two to eight months, has seen chronic acne of two years' standing entirely cured. In addition, it is sometimes necessary to give cod-liver oil and tonics. Has seen cases recover under this treatment when there was no benefit derived from sulphur, camphor, and rose-water, as recommended by Wilson.

Dr. Wanzer said he had treated a chronic ulcer of the leg by administering ℞. Hydr. bichlor. gr. ⅛, Opii gr. ¾, three times a day, with perfect success, and that he is curing one at present. Says that he recommended the above treatment to the physician in charge of the Poor-House, who also treated several ulcers of similar character with success, and has never seen but one exception. Thinks the way calomel cures inflammation is by diminishing the plasticity of the blood.

Dr. Quails asked Dr. Wanzer if he made any distinction between the specific and non-specific form of ulcer in his treatment?

Dr. W. replied that he did not.

Dr. Weller was permitted to make some remarks. Stated that he had treated acne successfully with the bychloride hydrargyri; also used it in diphtheritic ophthalmia and diphtheria of the throat. Has used it in the abortive treatment of felons, by preventing suppuration. Uses a solution consisting of bichlor. hydr. gr. j. to alcohol dilute ℥j. Cited a case which had been progressing four days, in which, by the application of the solution on a piece of cloth, all swelling subsided in fourteen hours.

Dr. Davis says it has generally been stated that mercury di-

minishes the plasticity of the blood. Thinks it true of some of its preparations. But much depends on the way it is used. Does not think its action always the same. Thinks the use of bichlor. hydrargyri beneficial in chronic albuminuria or Bright's disease of the kidneys, when the blood is spanæmic. Speaks of its use by Dr. Johnson in the New York hospitals twenty years ago, in the latter-named disease; also of his own use, in combination with the tincture of cinchona, bichlor. hydr. gr. j. and tinct. cinchona ℥ij., of which a teaspoonful was given three times a day. After continuing several days, the tinct. of cinchona was increased to ℥iij., the dose being the same, with an intermission of three or four days, to prevent salivation. After two months, there was but a scanty precipitate of albumen to be found in the urine. In one year the patient had gained very much, and was able to work two-thirds of a day in a harvest-field, although not entirely free from the disease. Has employed it in a number of cases since, and in most cases with some benefit. Speaks of its beneficial use in irritable corneitic inflammation, charaterized by the red zone around the cornea, with little ulcers upon its surface, and great sensitiveness to light. The class of children affected by this disease are generally of the scrofulous diathesis. For twenty years has hardly met with a case but what has yielded under the following treatment:—

℞. Tinct. Cinchona,---------- ℥ij.
Bichlor. Hydr.,---------- gr. j.
M.

Twenty drops of which may be given to a child five or six years old, three times a day. They do not generally begin to derive benefit from the medicine until it has been given four or five days. The photophobia and irritability being removed in three or four weeks.

Sometimes it is necessary to use anodynes locally. For this he uses morphia, 4 grs. in water ℥j., dropped into the eye three times a day; also veratria, grs. iij. to ℥iv. dilute alcohol, which may be applied as a wash over the eyebrows each night and morning. After the inflammatory symptoms have disappeared,

he often substitutes syrup of iodide of iron or of lime for the bichloride and tincture of cinchona.

After some brief remarks by Drs. Wanzer and Loverin, the discussion was closed, and the Society proceeded to Miscellaneous Business.

The President announced that at the last meeting there was an assessment of $1.00 made on each member of the Society.

Drs. Davis, Paoli, and Holmes were appointed on the "selection of proper subjects for discussion by the Society."

Dr. Davis wished to know if any members had information regarding the Bill now pending before the State Legislature to regulate medical practice.

Dr. Seely remarked, he had read of such in the city papers, and believed such a Bill should be passed. Upon his motion, Dr. Davis was appoidted a Committee to report on the subject at next meeting of the Society.

Society adjourned.

FRIDAY EVENING, Jan. 22, 1869.

The Society was called to order, President Marguerat in the chair.

Secretary Macdonald read the minutes of the last meeting of the Society, which were duly approved.

Dr. Clarke called for the law governing the non-attendance of members, which was read by the Secretary, setting forth, "that if a member was absent three successive meetings without notifying the Society of the necessity of his absence, he is liable to have his name stricken from the register as a member of the Society."

Dr. Reid reported several cases of neuralgia, which he had found quite obstinate in treatment:—

CASE I. A lady, who suffered great pain in her head towards morning, and truly paroxysmal in character. Gave quinine in large doses, and partially succeeded in allaying her sufferings. Then gave arsenious acid and Indian hemp, with marked improvement. She has been under treatment about three weeks, and is now in the use of iron, and nearly recovered.

Case II. Old gentleman. Pain along the sciatic nerve. Bowels constipated. Gave quinia, which diminished pain somewhat. Tried arsenious acid, without much benefit. Upon purging, there were hard, impacted fæces passed, and the patient was better afterwards. Tried the Voltaic battery, with some benefit. Pain left ankle, and went to hip. Blisters were applied, and patient seemed to improve for a few days, but is now nearly as bad as ever.

Treated several cases successfully by the use of arsenic and quinine.

Case III. Lady. Neuralgia of bladder every night. Gave purgative, when a great quantity of hardened fæces were passed. Gave quinia, with benefit. Gave Dr. Gross's colchicum and morphia treatment, which was followed by great disturbance of the bowels and severe purging. Patient improved rapidly. Thinks there is great benefit derived from purging.

Dr. Paoli says that he has used in these obstinate cases of neuralgia the permanganate of potassa, in $\frac{1}{4}$-gr. doses, three times a day, with marked benefit; also using a strong solution externaly.

Dr. Clarke says that he has had a number of cases of rheumatism of late, also a case of sciatica, in which quinia and arsenic had been administered, without benefit. Most of the cases were very obstinate, but had very good results from citrate of potassa.

Dr. Hamill reported the case of a lady who had neuralgia of crural nerve, which was paroxysmal in character. An hour before the paroxysm was expected, he introduced, by hypodermic injection, morphia, gr. $\frac{1}{4}$, into the inner part of the thigh. The paroxysm was arrested, but it left the pain diffused over a larger surface. Then gave

℞. Bromide Potassa,---------- ℥ss.
Tinct. Gelseminum, ---------- gtt. v.,

every three hours, when the pain was overcome. Treated ordinary cases of sciatica by the use of tinct. guaiac and phytolacca, equal parts; a teaspoonful of which may be given every four or six hours.

Dr. Loverin said he had treated a case of sciatica successfully by the use of cathartics, anodynes, Fowler's solution, and quinine. Says he has heard recommended large doses of the carbonate of iron, and also nydroganic acid.

Dr. Davis made the following report regarding the Medical Bill now before the Legislature. Stated that he had written a letter to Springfield requesting a copy of the bill, but he was unable to obtain it. He believed, from the knowledge he had received from his friend in Springfield, that the principal bill now before the Legislature is the one introduced by Dr. Edgar, the substance of which is: that it requires every man proposing to practice medicine in the State of Illinois to show that he has received a medical education; and that such persons having no diploma are to be examined by a medical board, and, if found competent, will receive a license, on payment of $25; and those physicians having diplomas, and presenting the same, upon payment of $5, would be registered. He was of the opinion that the two bills in the respective houses were somewhat the same; the object being to restrict the practice of medicine to such persons who had actually received a competent medical education. By this means, the community would be, in a great measure, protected against imposition. He also considered that so far as protecting the medical faculty was concerned, it only imposed upon them an additional burden, in the interest of the public. He hoped that the Society would take action in favor of having the bill passed and made a law, as the profession at Jacksonville and Springfield are evidently laboring to secure its passage.

Dr. Wickersham stated that he was opposed to the bill, and announced himself a radical on the question. He had not given twenty years of his life for the privilege of associating himself with *quackery*. He said he was surprised, and regretted, to see Dr. Davis favor the bill. He believed if our Legislature would pass a law excluding from the papers and periodicals quack medical advertisements, it would confer a great favor upon the public; but was entirely opposed to the Societie's taking any action on this matter whatever; for he was firm in the belief

that nearly all medical advertisers had diplomas from medical schools, and that this very bill would protect them in their impositions, for they could easily obtain certificates from the State Board.

Dr. Clarke expressed his views in favor of the bill, and believes we are in much need of such a law for protection of the people. Does not think more than one-tenth of the advertising quacks are graduates of our regular medical colleges.

Dr. Reid hoped the Society would act only upon a more thorough knowledge of the details of the bill.

Dr. Davis remarked that he was not a strenuous advocate of legislation for the profession, and said that any fair rendering of the bill would cut of those who were not legitimate members of the profession. The bill simply refers to medical education and medical practice, without recognizing homeopathy, or any other *ism*.

Dr. Hamill did not favor the further action in the matter, until the Society knew more respecting it; and moved that the matter be laid on the table.

Dr. Fitch hoped the Society would take immediate action, and adopt measures to secure the passage of the bill.

Dr. Wicksrsham was in favor of the Societie's passing a resolution against the enactment of such a law as the one proposed. He believed this was the age of medical, political, and religious quackery, and, as such, should be recognized and acted upon.

Dr. Paoli believed the profession should be entirely independent of all isms. He hoped all future action of the Society would be based on a copy of the bill.

Dr. Davis said he was confident that no legislature would pass a law creating a board of medical examiners, to examine those recommended by the medical profession.

The motion of Dr. Hamill being called for, the whole matter was laid on the table.

Society adjourned.

Selections.

ON AN EPIDEMIC OF TYPHOID FEVER.

By Dr. ROBERT PERRY, Physician to the Glasgow Royal Infirmary.

[During March, 1868, Dr. Perry's attention was directed to the existence of an epidemic of typhoid fever in the neighborhood of the Garnkirk Fire-Clay Company's Works, by the admission under his care into the Glasgow Royal Infirmary of five cases of that disease. The cause of the epidemic, having been investigated, was removed. The origin and mode of propagation of typhoid in isolated places such as this is, are always more instructive, and consequently more interesting, than they are in large towns.]

I may state, for the information of those who are unacquainted with the situation and surroundings of the Garnkirk Fire-Clay Works, that they are situated at about six miles from Glasgow, immediately on the line of the Caledonian Railway, from which a line of rails enters the works for the purposes connected with the manufacture of the fire-clay bricks, tiles, and many other articles, which are noted over the globe for their superior quality. Directly adjoining the works, and on ground rising somewhat towards the north and west, are a number of cottages occupied by the work-people and their families. The entire population of the surrounding houses may be roughly estimated at between 600 and 700. Beyond the workmen's cottages, and extending on every side, is an undrained moss, beneath the surface of which the famous fire-clay is found. With the exception of one or two small farm-houses and some pitmen's cottages, there are no other dwelling-houses within nearly a mile of the works. On the north side of the kilns and workshops, and surrounded almost on three sides by the cottages, is a large pond or reservoir of water for the use of the works and work-people. This reservoir is supplied with water from an adjoining clay-pit, the shaft of which is situated about 500 yards distant. The water is pumped out of the pit, and conveyed to the reservoir through fire-clay pipes, which are embedded only to a very slight depth in the ground. The number of men at work in the pit at the date of my inquiry was about fifty, and at that particular time the number was much less than the average of those who usually found employment there. I ascertained that there were no privies in the pit, and that the pitmen were in

the habit of passing their evacuations, when necessary, at any convenient part of the workings. From the clayey nature of the floor of the pit, it can readily be understood that little or no absorption takes place, and the whole drainage of the pit gravitates to the bottom of the shaft, whence it is pumped up, and the water so collected passes through the before-mentioned pipes to the reservoir. The greater part of the surface drainage from the ground surrounding the cottages, as well as the sewage and waste water from the houses, is intercepted before reaching the reservoir, and carried off by open surface drains running parallel with it, and those open drains are regularly swept and kept clean. At the end of the pond, however, at which the water supply pipe is led in, I observed a considerable quantity of sewage and surface drainage finding their way into the reservoir. From this fact, and judging from the general appearance of the water in the reservoir, there could be no doubt of its being largely contaminated with sewage and putrefying matter; but, on the other hand, there is no proof that the water taken directly out of the reservoir is ever employed for drinking or cooking. At the back and side of the row of cottages, immediately adjoining where the conducting-pipe passed, I observed that the ground was thickly studded with human excrement, and refuse thrown out from the houses, the privies and dungsteads being somewhat deficient there. Workmen were, however, engaged in preparation for building them, and I understand that the deficiency has since been supplied.

In addition to other measures recommended, I advised that the joints of the conducting-pipe in the neighborhood of the cottages should all be carefully examined and made secure. I have since been informed that when this was done, one of the fire-clay pipes at this particular part was found to be broken; and, moreover, that the surface water from the ground to which I have just referred was seen to flow into the broken pipe.

Here, then, was a clear proof of the impure and unwholesome state of the water passing through the pipe; and as all the water for domestic use was drawn from this pipe as it falls into the reservoir, seeing there is no other source of supply, we need feel no surprise at the outbreak of enteric fever which took place amongst those who made daily use of it. I regret that I have not been enabled to make out the exact amount of impurities in either the pit or reservoir water, by an accurate chemical analysis. I requested a specimen of the water to be sent to me for the purpose of analyzing it; but my request was not complied with.

Throughout the cottages adjoining the works there had occurred during the past month, and up to the date of my visit, about forty-five cases of enteric fever (without being strictly accurate as to numbers). A few of the cases had been removed to the Glasgow Royal Infirmary; but the majority were under treatment in their own homes. There was also one patient suffering from enteric fever in a cottage on the opposite side of the railway, and situated only a short distance from the works; and it is an interesting fact to note, that the inmates of this cottage derived all their water-supply from the same source as the people in the works.

Mr. Murray also mentioned to me, that he had at that time one patient suffering under the same fever in the village of Chryston, which is nearly two miles from Garnkirk; but that up to the time of his seizure he was employed in the fire-clay works. I was not able to hear of any cases of the disease among the workmen of the same Company who resided at a place called Crow Row, less than half a mile distant from Garnkirk, but which is supplied with water from a different source.

It is worthy of remark, that the proprietors of the works have for years been in the habit of furnishing, gratis, a filter for the use of the inmates of each cottage. Only a few, however, of the inmates availed themselves of this offer; and it is somewhat remarkable, that I did not find a single case of fever in any of the houses where the water was regularly filtered before being used for drinking or culinary purposes. Mr. Murray subsequently informed me that one or two cases did occur among those who used the filters; but that the proportion of those attacked in the houses where filters were used was very much smaller than among those who used the water unfiltered.

Very shortly after the adoption of the measures recommended for the prevention of the contamination of the water, a marked diminution in the number of individuals attacked was observed to take place. In about a month after, the fever was almost eradicated; there being only five or six cases, and those of a much milder type, and principally confined to children. There were in all above sixty individuals attacked, and amongst these the proportion of fatal cases was very small. At the commencement of the epidemic, the type of the fever was somewhat indefinite. Bronchial symptoms were more prominent than enteric symptoms, and several of the patients were sent into the general medical wards of the Glasgow Royal Infirmary as cases of bronchitis. In a short time, however, the abdominal

symptoms became more decided, and the characteristic diarrhœa, which was altogether absent in many of the earlier cases, soon assumed a very severe form.

I endeavored to trace out the history of the first case of enteric fever that had occurred at the works, and likewise if any connection could be discovered between the first and the succeeding ones. A rumor was mentioned to me of two men having recently come to the works who were at the time suffering from, or were immediately after attacked by, the fever. On strict inquiry, however, I was not able to find any foundation for this rumor.

Whether the germs of the disease were introduced from without, or originated *de novo* in some of the individuals who were using the water contaminated as I have pointed out, is not in this instance able to be proved beyond doubt. It is certain, however, that the very first case occurred in one of the cottages in the row immediately adjoining where the pipe conducting the water passed, and where I before mentioned that the privies and dungsteads were deficient.

If, as is more than probable, the intestinal discharges from this first case found their way into the pipe, the propagation of the fever by this means was most certain; and if the manager had not promptly carried out the recommendations for the suppression of this and the other likely sources of its propagation, there is but little doubt that the consequences would have been much more disastrous.—*Lancet, June 6, 1868, p. 718.*

A CASE OF HERPES ZOSTER.

Read before the Boston Society for Medical Observation, by F. B. GREENOUGH, Boston.

The following case of herpes zoster nuchæ, vel collaris, accompanied by, or coinciding with, a facial paralysis on the same side, occurred in the practice of Dr. John Homans, and it is through his kindness that I have been enabled to see and report it. It has been pretty universally conceded that herpes zoster is often, in some way, connected with a lesion of the cutaneous nerves of that portion of the integument over which it is distributed. The reasons for assuming this may be briefly stated as follows: The eruption always seems to follow the course of a nerve; this is constant, and, although there may be more or less irregularity in its distribution, on the whole, the

course of the eruption coincides pretty nearly with that of the nerve. Moreover, the eruption is very often preceded, accompanied and sometimes followed by, neuralgic pains in the nerves over which it appears. That these pains are really of a neuralgic character, and not merely due to the soreness of the eruption itself, is proven, first, by the character of the pain; and second, by the fact that the pain not only often exists before the eruption appears, and continues after it has disappeared, but that it is even worse sometimes at that time, than while the eruption is present. As has been said, then, it is admitted that herpes zoster is in some way connected with an affection of the nerves, as is shown by the coëxistence of neuralgic pain; that is to say, by an affection of the sensitive fibres of the nerves. *A priori*, we should suppose that any influence or cause that was able to produce an abnormal condition of the sensitive fibres of a mixed nerve, would also affect the motor fibres. Thus, we know that in a bad case of sciatica, the leg is for the time being more or less paralyzed. I have not, however, been able to find any mention of a motor paralysis in connection with herpes zoster, except in Hebra.* He states:—"It sometimes happens that the persistence and intensity of this symptom" (*i.e.*, neuralgia) "render the disease a very painful one; and in some cases the functions of the motor nerves also are interfered with."

That Hebra makes such a statement as this, is sure proof that he not only has seen cases where a paralysis of motion coëxisted with zoster, but that he also convinced himself that there was some connection between the two, as he is not apt to take anything on hearsay, nor to believe what he has not seen. There are reasons why in many cases of zoster, even if a lesion of the motor fibres did exist, it should have escaped notice. The most common situation of zoster is over one or more of the intercostal nerves, whence its synonym, zona. If we reflect on the nature and use of the intercostal muscles, whose motive power depends on these nerves, we shall see that one or two of them might be paralyzed without causing noticeable inconvenience. For we cannot voluntarily use them separately; and even if one or two did not contract, the others would be sufficient to carry on the respiration. When zoster is situated on the legs or arms, it is distributed over the course of the larger cutaneous nerves, whose motor fibres also might be paralyzed without causing any symptom. In zoster cervicalis, however,

* Hebra on Diseases of the Skin. Translated by Fagge. New Sydenham Society. London. 1866.

the case is different, as will be shown later. It is on account of a symptom which theoretically seems naturally to belong to a case of zoster, having escaped the observation of all writers on the subject except Hebra, that the following case has been thought worth reporting:—

W. K., æt. 33; married; mechanic. Patient has always enjoyed fair health up to about a year ago, although he has never been very robust. Some time in December, 1867, he had an acute affection of the lungs, for which he came under the care of Dr. John Homans. The diagnonis was pneumonia. He was ill about eight weeks, and made a slow recovery. Ever since that time he has been troubled with a cough, some pain in his chest, muco-purulent expectoration, loss of flesh, night-sweats, etc. In short, he has had the rational signs of tubercular trouble. During the last part of October, 1868, he had considerable pain, of a neuralgic character, about the left side of the face and neck. No history of exposure to cold could be obtained.

On the 1st of November, an eruption appeared on the left side of his neck. From his description, the eruption appears to have been vesicular, as he says it was covered with "blisters," some of which he pricked, and a clear, transparent fluid oozed out. There was no itching, but much smarting and burning. The neuralgic pain continued, but was somewhat less than before the eruption made its appearance. On November 11th, he first noticed what he describes as a numbness of the left side of his face. He could not close his left eye, his mouth was drawn to the right side, and he was much troubled by his food getting between his gums and his left cheek, from whence he had to continually remove it with his finger. There was no loss of motor power of the extremities, nor, as far as could be learned, was there any abnormal condition of sensation of any part of the body. After a day or two, the left eye became injected and painful.

I first saw the patient on November 19th; that is to say, on the nineteenth day of the eruption, and the eighth of the facial paralysis. He was a man of medium size, thin and pale, with an occasional hacking cough. No examination of the chest was made, but I have been informed by Dr. Homans that there is undoubtedly some solidification of the lower part of the right lung. The eruption on the left side of neck consisted of several patches about the level of the thyroid cartilage, and extended backwards and upwards. The patches were more or less oval, varied in size from one-fourth to one inch in diameter.

They were separated from each other by intervals of healthy integument. They consisted of red, inflamed bases, being covered partially by dirty yellowish crusts; and, where these were wanting, showing small, superficial, but angry-looking ulcerations. Each patch was surrounded by a well-marked red areola. One of the patches extended to the median line, in front, at level of thyroid cartilage; another reached almost to the median line behind, a little below the occipital protuberance; and there were some behind the ear. No vesicles or pustules could be seen; but it seemed probable, from the appearance of the crusts and ulcerations, that the former had been produced by the drying up of the vesicles and pustules, and the latter by their destruction. The left eye could not be closed, the left nostril was flat, and the mouth was drawn to the right side. The tongue was protruded straight, the uvula hung perpendicularly in the median line, and on saying ah! no one-sided action of the muscles of the soft palate could be detected. The conjunctiva of left eye was normal, but, by patient's account, it had been quite inflamed up to two days previous. Both pupils reacted normally to light, and were of equal size. Sensation of left side of face was normal, and on a careful examination, no evidence of any impairment of motion or sensation of any other part of body could be found. There was no discharge from the left ear. Patient stated that he could not hear as well with his left as with his right ear, and on testing with watch the power of perception of sound, did seem less on that side. The test, however, was not very satisfactory, nor could a definite answer be got from the patient as to the existence or not of this deafness previous to present illness. There was still some neuralgic pain about left side of face and neck, but much less severe than at first. There was not, and never had been, any twitching of left side of face.

After this, the course of the disease was steadily towards cure. The ulcerations healed, the crusts fell off, the pain diminished, and the power of motion slowly returned to the facial muscles. The improvement, in this latter respect, was so gradual that it was not noticed by either the patient or his wife, from day to day. At present, his face is perfectly natural. The eruption lasted about four weeks, and left scars behind it. The paralysis lasted a little longer.

Such, very briefly stated, is the case which I have thought worth reporting. For a consideration of it, three series of investigations suggest themselves:—

1st. As to the nature of the eruption.

2d. As to the nature of the paralysis.

3d. As to the nature of the connection between the two.

With regard to the nature of the eruption. Hebra's* definition of herpes is as follows:—"It is benign, runs an acute course, and is attended with the formation of miliary papules, which are arranged in groups, and generally undergo development into vesicles and pustules as large as lentils, or even still larger. It is never distributed over large tracts of the cutaneous surface, being always confined to certain definite regions. After remaining a few days, or as long as four weeks, it dries up into flat crusts, which often leave scars when they fall off." This definition applies to the whole genus herpes, one of the species of which is herpes zoster, which he describes as follows:—"I include under this name all those skin affections which present the characters of herpes, and in which the part of the surface occupied by the groups of vesicles corresponds to the distribution of certain cutaneous nerves, and which last (whether occurring on the head, trunk, or limbs) are confined to one-half of the body."† To the species zoster he gives different names, according to the part of the common integument on which the eruption is developed. One of the local varieties is thus described, under the name herpes zoster nuchæ, vel collaris:—"In this form of shingles the eruption first makes its appearance on the side of the neck, over the second and third cervical vertebræ, and extends thence upwards towards the lower jaw and face, forwards towards the larynx, and lastly downwards; a few clusters reaching even as far as the second rib."‡

It must be seen how perfectly these definitions apply to the case under consideration. It is true that, when seen by me, no vesicles were present, but the appearance of the crusts and ulcerations, on the nineteenth day of the eruption, was such as to convince any one that vesicles and pustules had existed, without falling back on the history of the case, as given by the patient himself. The situation of the eruption was over the second and third cervical nerves and their branches; two patches or groups of crusts were over the course of the superficialis colli; others were over the auricularis magnus and occipitalis minor, and others still over the occipitalis major. The course of the disease tallies exactly with Hebra's definition: the efflorescence was unilateral, coming up sharp to the median line in front, and nearly so behind; and, moreover, the characteristic neuralgic pain of herpes zoster was present. If this positive

* *Op cit.*, page 368. † *Op cit.*, page 372. ‡ *Op cit.*, page 376.

evidence is not enough, we have the negative evidence of exclusion. The only other cutaneous diseases, except herpes, to which an eruption having this location and appearance could belong, are eczema, sycosis, and some of the syphilodermata.

That it was not an eczema, is shown by the absence of itching, by the presence of ulcerations, by the large size of the vesicles, as described by the patient and proven by the size of the crusts, and, lastly, by the fact of a scar being left behind after the eruption had healed.

To exclude sycosis, we have the existence of patches beyond the region of the beard, as behind the ear, the sharply-defined character of the patches, with healthy skin between, the absence of any evidence of inflammation of the hair-follicles, and, lastly, the spontaneous cure in four weeks.

A syphilitic eruption with crusts and ulcerations would have had thicker crusts and deeper ulcerations, and other evidences of the presence of the syphilitic virus in the system would probably have been found.

Assuming, then, that the eruption was herpes zoster, let us glance at the paralysis, and see if any conclusion with regard to its nature can be arrived at.

From the muscles that were paralyzed, *viz.*, the left orbicularis palpebrarum, the levators of the upper lip and nostril, the left side of the orbicularis oris, and the left buccinator, the nerve affected must have been the left facial or seventh cranial nerve.

Facial paralysis is one of the most common lesions of motor function observed. Like other nervous lesions, it is generally divided by writers into two classes, the organic and functional; the former consisting of those cases in which some organic disease of the nerve or nervous centres exists, and the latter of those in which all we can get evidence of is an abnormal state of functional activity, without appreciable cause.

This classification is not a very satisfactory one, as when we call a paralysis functional, we simply state in other words that we know nothing about it. There is some reason in speaking of organic and functional diseases of the heart and stomach, for instance, as we see the functions of these organs often interfered with, while the organs themselves are perfectly healthy; as, for example, palpitation from excitement, or arrest of digestion from anger or fear. In such cases, we know that there is no disease of the organs, and fall back on the nervous system as being the cause of the trouble. But in case of derangement of the nerves themselves, we have nothing to fall back

upon, and we must consider that perfect integrity of nerve tissue must be accompanied with normal functional activity. There certainly are cases where we do not, and probably never shall, know what the lesion is, but that it exists must be admitted. Undoubtedly, half a century ago certain nervous affections would have been classed as functional, which now are shown by the microscope to be due to a hypertrophy of the connective tissue of the neurilemma, and a consequent pressure on the nerve fibres. The term, however, is a convenient one, if it is only used understandingly.

An organic paralysis of the facial nerve might be due to many causes, such as any disease of the encephalon or nerve itself, or pressure, as by blood, serum, or pus, or by a tumor of the brain itself, or of the meninges, by an exostosis, or by a depressed fragment of a fractured skull; or, in short, by any cause which should produce pressure on the brain or nerve.

This pressure might be situated either on that part of the nerve which lies within the cranium, or within the aqueductus Fallopii, or after it has emerged from the styloid foramen. Any destruction of continuity of the nerve would also cause paralysis. In the case under consideration, the whole series of intracranial lesions is excluded, by the fact that no other cranial nerves were affected, nor was there any paralysis of the spinal nerves distributed to the extremities. Had the trouble been in the Fallopian canal, it probably would have been due to caries of the bone, in which case we should have some symptoms, as pain, otorrhœa, etc. It has been noticed in many cases of hemiplegia, that one side of the tongue and half the uvula and soft palate are paralyzed. This is due to the fact that the facial nerve is connected with the gustatory nerve, by means of the chorda tympani, and also furnishes motor fibres to the azygos uvulæ and muscles of the soft palate through the large petrosal nerve, which goes to the spheno-palatine or Meckel's ganglion, from which the motor fibres descend to the above-mentioned muscles. Both these branches are given off from the facial within the aqueduct of Fallopius; and consequently, had there been any pressure or disease there, the tongue and uvula would have been paralyzed on that side. That there was no tumor pressing on the nerve after its exit from the styloid foramen, was evident through palpation and inspection. Moreover, the course of the disease was not that of an organic lesion. It came on suddenly, it is true, by the patient's account; but it only lasted about five weeks, and disappeared entirely. It may have come on so slowly that the patient may not have noticed it

until it was complete. This seems more than probable, when we remember that that was the way in which it disappeared.

Having, then, excluded organic lesions, in the common acceptation of the term, let us see by what other causes facial paralysis may be produced. Most writers on the subject consider that this affection is often due to the effect of cold or damp air, especially as a draught. Niemeyer, Grisolle, Brown-Séquard, and Flint, who certainly stand at the head of the ranks of medical writers in their respective countries, all agree in ascribing to this cause the great majority of cases of uncomplicated, functional, facial paralysis. One thing should be kept in mind, and that is, that of all the causative influences to which disease is ascribed, that of cold is one of the most unsatisfactory. It is an influence which, living as we do, can almost always be found, as few persons can look back for a few days without recollecting some occasion on which they were exposed to a draught of wind, or had gone from a high temperature into a lower one.

It is not meant to deny the influence of cold in sometimes causing disease; but every physician knows how often the formula "taken a little cold" is used to represent some entirely unknown pathological condition. Besides, in this case, strange to say, the patient could not refer to any particular exposure. Let us look farther, then, and see if some more definite diagnosis cannot be arrived at.

There is a class of functional or essential paralyses, about which much has been written. I refer to the so-called reflex paralysis; that is to say, to those cases in which paralysis follows peripherical irritation. Brown-Séquard, in his "Lectures on the Diagnosis and Treatment of Functional Nervous Affections,"* places at the head of the list of the causes of functional affections of the nerves," an irritation (by worms, by teething, or a decayed tooth, by a cold, by a burn), a wound, an inflammation, a neuralgia, etc., of centripetal fibres."

The fullest and most perfect account of these cases is that given by Dr. Graves, in a course of lectures given at the Meath Hospital at Dublin. I cannot do better than to quote an abstract of the lectures referring to this subject, as given by Dr. Graves in a later publication.† He says: "In the lectures to which I have already referred, I showed that this mode of accounting for all forms of paralysis, by referring them to original disease of the nervous centres, was in many cases incorrect, and proved, I think to the satisfaction of the class, and those who read the lectures, that a most important and influen-

* Page 15. † System of Clinical Medicine. Dublin. 1843. P. 396.

tial cause of paralysis had been hitherto nearly overlooked; a cause which, commencing its operation on the extremities, and not on the centres of the nervous system, might, by a reflex action, produce very remarkable effects on distant parts. I brought forward on that occasion many arguments, facts, and cases, to prove the possibility of such an occurrence, to show that it frequently happens that impressions made on the extremities of nerves will generate a morbid action in them; that this morbid action will be conveyed along their branches and trunks, to the spinal cord, or brain; and that, continuing its propagation, it may, by a retrograde course, be carried thence along the nerves to distant organs, and in this way give rise to disease in parts originally intact and healthy. I brought forward several instances to prove that when a certain portion of the extreme branches of the nervous tree has suffered an injury, the lesion is not confined merely to the part injured, but in many cases is propagated back, towards the nervous centres; and that in this way, not only the nervous filaments of the injured part may be affected, but also the main trunk of the nerve and other branches; or that the lesion may reach the brain, or spinal cord, and thus produce still more extensive effects on the system. What I endeavored to impress upon the class at that time was, that pain, numbness, spasms, and loss of power of muscular motion, may be produced by causes acting on the extremities of the nerves; and that such affections, commencing in the extremities of the nerves, may be propagated towards their centres, so as to be finally confounded with diseases originating in the centres themselves."

Many interesting cases are given, all of which go to show that paralysis of motion has been observed following, or coinciding with, the most different species of irritation of the periphery of the nerves. I will only quote one. "A young lady having wounded the inside of her ring-finger with a blunt needle, observed that she had, in consequence of the injury, a considerable degree of numbness, not only of the finger wounded, but also of the little finger next it. Here we find that an impression, made on the nerve of one finger, not only affects that finger, but travels backwards, so as to operate on the branch given by the ulnar nerve to supply that finger, and given off, observe, above the place of the wound, so that the phenomena were identical with those which would arise from an injury inflicted on the branch which would supply both fingers."*

Flint, on the other hand, is inclined to doubt the existence of

* *Op cit.*, p. 397.

reflex paralysis. He says:—"Cases have been reported by Graves, Romberg, Rayer, Brown-Séquard, and others, within late years, of paraplegia, apparently referable to various affections of different organs—*viz.*, the kidneys, bladder, uterus, ovaries, intestines, etc. A causative connection between the paralysis and the diseases seated in these organs, is inferred, from the fact that recovery from the former takes place after the latter are cured. It is supposed that the local diseases induce paralysis, by a morbid influence transmitted through the reflex system of nerves; and hence the term reflex paraplegia has been used to distinguish the affection in these cases. In order to establish a pathological connection between different local diseases and paralysis, it is necessary to show that the former precede the development of the latter, in a proportion of cases too large to be explained by merely accidental coincidence. It is questionable whether facts sufficient to show this have been yet accumulated. And when, on the other hand, it is considered that the various local diseases supposed to be adequate to the causation by a reflex influence, are not accompanied by paralysis in the vast majority of cases, the existence of a causative relation may reasonably be doubted in the cases in which the association exists."*

It must be confessed that there is some force in this argument. Let us see if the anatomical relations of the nerves affected in this case are such as to warrant the diagnosis of reflex paralysis, assuming that such a disease does exist.

The facial nerve derives its roots from the floor of the fourth ventricle, and from the groove between the olivary and restiform bodies. The posterior roots of the cervical nerves which contain the sensitive fibres, of whose lesion we have evidence, arise from the posterior columns of the cord. These points of origin are not so distant but that, could no other more plausible theory be found, we might suppose that the paralysis was due to a morbid influence transmitted along the cervical nerves, and caused by the eruption, to the cord, and thence propagated outward along the facial. Would not, however, the tongue and uvula be paralyzed, if the cause of the paralysis was sent out from the origin of the nerve?

While searching for the possibility of a connection between the roots of these nerves, we must not neglect to see if they are connected together at their periphery; and, in so doing, we find a most intimate connection by means of anastomoses.

These anastomoses, which connect the second and third cer-

* Principles and Practice of Medicine. Philadelphia. 1867. P. 635.

vical with the facial nerve, are three in number. 1st, the superficialis colli joins a descending branch of the facial; 2d, the auricularis magnus joins the facial by quite a large branch; and 3d, the occipitales major and minor inosculate with the posterior auricular. A glance at the case under consideration shows us that these very three branches of the cervical plexus, which have such an intimate connection with the facial nerve, are the ones over which the herpetic eruption was developed. We have, then, here an affection of two different nerves, which are anatomically very intimately connected at their peripherical ends; the lesion of the one being manifested by a paralysis of motion, and this is the only symptom we can expect, as the nerve consists only of motor filaments; that of the other being shown by neuralgic pain, but we cannot say but what the motor fibres also are affected, the distribution of the nerve being such, that if they were, no symptom would be given. Is it not logical to assume that these two affections spring from a common cause? What the cause may be we do not know, but we do know that for some reason, in most cases of zoster, we have a lesion of certain nerves; we know that to be so in our case; but, in addition, we find a lesion also of another nerve, which is intimately connected with the first.

It certainly seems more natural to ascribe these both to a common cause, than to go to reflex paralysis (which, perhaps, does not exist as a disease) for a solution. What could the possible connection between these two coëxisting affections be?

They might be simply the accidental result of coincidence.

They might stand to each other in the relation of cause and effect.

Or they might both be due to a common cause.

The intimate anatomical connection between the two nerves, makes it more than probable that there is something more than mere coincidence. The zoster could not be caused by the paralysis, as it preceded it; the paralysis might have been caused by the zoster, if reflex paralysis is admitted, and if enough has not been said to exclude it. Or, they might both be due to some common cause; as we suppose, some unknown lesion of the nerves themselves.

One other influence at whose door the causation of both lesions might be laid, should be mentioned, namely, cold.

It has already been stated that many cases of facial paralysis are supposed to be due to this agent, and by several writers a prominent position is given to cold in the etiology of herpes zoster.

I can only repeat what has been said, as to the unsatisfactory evidence of cold, as a cause of disease, especially where, as in this case, there is no evidence of any exposure to it.

I have endeavored to show that in this case of zoster, we have evidence of other nervous lesions besides neuralgia, which, if corroborated by other cases, will certainly show that the unaccountable neuralgic pain which so frequently accompanies zoster, is due to some lesion of the nerve itself.

Of course nothing has been proved, and undoubtedly this will pass with many as a case of reflex paralysis. Whether such a disease exists or not, I do not pretend to decide; but I have endeavored to show that this case is probably not an example of it.

Be this as it may, however, it has at least been shown that there probably is some connection between the zoster and facial paralysis in this case; and should other similar cases be noticed and reported, perhaps some light might be thrown on what is at present, as far as pathology and etiology go, a most obscure disease.

If this brief paper should be the means of calling the attention of those of the profession, who have the opportunity of seeing much cutaneous disease, to this point, it will accomplish all that the writer dares to hope for.—*Boston Medical and Surgical Journal.*

HOW TO TEST THE PURITY OF WATER.

It is of importance to be able to test the quality of water, not only when for special purposes absolutely pure water is required, but even in cases where such purity is not requisite, it may be of great interest to ascertain of what the impurities consist. The following short notice of the tests for the most commonly occurring impurities will be welcome and useful to many of our readers:—

Pure Water must satisfy the followinß Conditions.

1. It must have no residue whatever when evaporated in a clear porcelain or platina dish.

2. It must form no precipitate with a solution of nitrate of silver, which would indicate common salt, some other chloride, or hydrochloric acid.

3. It must not precipitate with a solution of chloride of barium, which would indicate a sulphate or sulphuric acid.

4. It must form no precipitate with oxalate of ammonia, as this would indicate some soluble salt of lime.

5. It must not assume any dark or other shade of color when passing sulphuretted hydrogen gas through it, or mixing it with the solution of a sulphide salt, as this would indicate the presence of lead, iron, or some other metal.

6. It must not become milky by the addition of lime-water, or a clear solution of sugar of lead, as this would indicate carbonic acid.

7. It must not discolor by adding solutions of corrosive sublimate, or chloride of gold, or sulphate of zinc, which discoloring would indicate the presence of organic substances. When boiling water with chloride of gold, the least trace of organic matter will reduce the gold, and color the water brown.

Results of these Tests.

1. Almost all spring-waters are found to leave a residue upon evaporation.

2. Common salt is not only found in most springs and rivers, but even in rain-water, many miles inland, when the wind blows from the ocean.

3. Sulphuric acid and sulphates are found in many springs. The Oak Orchard Spring, N. Y., for instance, is very rich in the free acid.

4. Waters from lime regions all contain lime in large quantities; and, in fact, this is the most common impurity of spring-waters.

5. Iron is contained in large quantity in the so-called chalybeate springs; also copper and other metals are encountered; lead incidentally, by the lead tubes through which it often is made to pass.

6. Carbonic acid is the most common impurity; even distilled water is not always free from it. Water will naturally absorb carbonic acid gas from the atmosphere, which latter always contains it; its principal source of supply being derived from the exhalations of man and animals.

7. Organic substances are often found in the water of running brooks, streams, and rivers, and are of course obtained from the vegetation and animal life in the water itself, and from the shores along which it floats.

Remarks.

1. The healthfulness of water depends on the nature of the residue left after evaporation; for many chemical and other operations where absolutely pure water is required, the leaving of residue at once proves the water unfit for use.

2. The existence of small quantities of common salt in the water is not objectionable, it being not injurious to health.

3. Sulphuric acid and sulphates may be objectionable for daily use; however, such waters are used medically to stop diarrhœa and excessive tendency to perspiration.

4. Lime-waters do not agree with some constitutions, producing diarrhœa and divers disturbances; very small quantities of lime, however, are not injurious.

5. Iron is healthy, and is a tonic; in fact, this metal and manganese are the only ones which may be used in large doses, not only with impunity, but even with benefit; however, there is also a limit. Overdoses of iron may produce diarrhœa, and slight eruptions of the skin, or pimples.

6. Carbonic acid is not objectionable when drinking the water; on the contrary, it makes it more palatable, and most mineral waters owe their reputation to this substance.

7. Organic substances are perhaps the most objectionable, principally when decaying; such waters may even propagate diseases, and require careful filtering, or boiling, or both, to make them fit for internal consumption.—*Scientific American.* —*New York Medical Journal.*

THE DOCTRINE OF ANIMAL QUINOIDIN.

A discussion on this subject in the Paris Biological Society, is referred to in the *Gazette Hebdomadaire*, from which we translate the following passages:—

Two years ago, Dr. Bence Jones, of the Royal Society of London, in the course of his researches on the time required for certain substances to traverse the tissues, was much embarrassed in regard to sulphate of quinia. To demonstrate the presence of this salt, Bence Jones and Dr. Dupré conceived the ingenious idea of subjecting the tissues to the action of acids, and examining the solutions thus obtained by means of the fluorescence produced by electric light—such fluorescence being presumed to indicate the presence of quinia. Great was their surprise to find the same fluorescence in animals that had not taken the quinia salts, as well as those that had. They came to the conclusion that there exists in the economy a substance capable of producing the same fluorescence as the sulphate of quinia. Bence Jones infers the existence of an animal quinoidin. He considers this new alkaloid an albuminoid derivative, which he places between casein and indigotin.

According to the same writer, this quinoidin plays an impor-

tant part in the phenomena of nutrition: it acts as a conservative agent in retarding organic combustion. Having noticed the disappearance of the natural fluorescence in the urine of patients with intermittent fever, he regarded as possible the destruction of the quinoidin by malarious poison. Then, the more rapid combustion of the tissues would produce fever; and thus we may comprehend the mode of action of febrifuges such as quinia and arsenic; substances which, like the supposed quinoidin, have the property of retarding organic combustion.

Dr. Chalvet has confirmed the statements of Bence Jones, and demonstrated by his experiments that there exists in the tissues a substance capable of giving a fluorescence absolutely comparable to the phenomena of refrangibility produced by sulphate of quinia. He also demonstrated that this fluorescence often disappears in intermittent fevers; but he does not accept the interpretation of the English author, on the origin of the assumed quinoidin. He has, in fact, demonstrated that this fluorescent substance exists in most aliments, especially in wine and vegetable substances. He concludes, from his researches, that the assumed quinoidin is not an albuminoid derivative; that it is introduced into the organism with the ingesta; that it mingles with the humors and tissues like iron, but, unlike iron, it is not generated in the organs. Possessing the property of rapid elimination by the secretions, we can comprehend how a diet somewhat reduced may cause its disappearance from the urine, and thus explain the asserted destruction of quinoidin by fever. Dr. Chalvet inclines to regard this substance as analogous to quinia; and, as it is produced in infinitesimal quantity in almost all vegetables, its constant presence in the solids and fluids of all animals is easily explained. But this does not prove that the substance, though in minute quantity, is incapable of performing an important part in the phenomena of life; for we know that the mere presence of a few particles of certain matters may develop, by catalysis, forces of great relative magnitude.—*Pacific Medical and Surgical Journal.—American Journal of Dental Science.*

Oceanic Life at Great Depths.—At a meeting of the Royal Microscopical Society on Wednesday night, the 9th instant, Dr. Carpenter anticipated his paper already presented to the Royal Society by offering some remarks on, and exhibiting specimens illustrative of, his recent deep-sea inquiries. It will be in the memory of our readers that in the autumn Dr.

Carpenter and Professor Wyville Thompson, of Queen's College, Belfast, went out, under government auspices, to conduct certain biological and physical investigations into the characters of the fauna and the temperature of the water at great depths. The expedition was carried out with the greatest success, and with the most remarkable results. The researches of Dr. Wallich and other able zoölogists had determined that the dictum of Forbes respecting the depth at which animal life existed was unfounded, and that animals existed at a depth of several hundred fathoms in the ocean. Dr. Carpenter now confirms this fact, and extends it in many important directions. In the very interesting sketch of his excursion given by Dr. Carpenter it was shown that even at depths so great as 650 fathoms in a line south-west (?) of the Faroe Islands the dredge brought up not only Globigerinæ and similar low forms of animal life, but representatives of all the great invertebrate types. Many of the specimens of Protozoa captured at this depth were exhibited by Dr. Carpenter, and some of them were certainly extraordinary samples of classes whose members are generally extremely minute. Indeed, these discoveries of Dr. Carpenter open up to us quite a new phase of animal life, and reveal a vast field for physiological speculation and inquiry. Of the specimens exhibited under the microscope we noted the following: Cristelaria, Textularia, Cornuspira, Trochamina, Lituola, Rhabdammina and Astrorhiza limicola. The last especially is a most remarkable creature, and one likely, we should think, to afford zoölogists many difficult problems for solution. In reference to the results of the physical discoveries, one of the most singular and noteworthy is that of temperature. Several carefully conducted soundings have convinced Dr. Carpenter and his colleague that whilst the surface water has an almost invariable temperature of 52°, the heat at great depth varies exceedingly. Thus at one point in their voyage they found, at a depth of 500 fathoms, the temperature was 32°—a fact which is explained by the supposition of a cold Arctic stream flowing from the north-east, and apparently coming between the fork of the Gulf Stream. Another interesting fact established by these inquiries is, that even at a temperature in the ocean almost that of our freezing-point there are an abundance and variety of animal forms which could not have been predicated. Dr. Carpenter's researches will soon be laid before the public *in extenso*, but in the meantime we could not resist bringing the above extraordinary and unexpected results under the notice of our readers.—*Medical Times and Gazette, Dec. 12, 1868*, and *Med. News.*

The Clinique.

FROM THE SERVICE OF PROF. N. S. DAVIS, IN THE MEDICAL WARDS OF MERCY HOSPITAL, DECEMBER 30, 1868.

REPORTED BY W. A. BARSTOW.

GENTLEMEN:—This young man came here from Waukegan, for the purpose of a careful examination of his case. He states that about one year ago he received an injury, by being struck by a wheel weighing about 50 lbs., which was thrown off the shaft while making some 350 revolutions per minute. The blow was received across the right shoulder, extending down below the scapula. At the time he felt no pain, and there was no soreness of the parts until about two weeks after, when he says he felt a lameness and soreness in the side, midway between the 7th and 8th ribs.

The soreness continued to increase for three months, when there appeared an abscess, which was opened by his attending physician. This abscess has continued to discharge ever since; sometimes the pus is thin, and sometimes of a thicker quality. At present, the patient complains of a pain in the right hypochondriac region. You notice, by percussion, that the hepatic dulness is about normal. If the liver had furnished this abscess, it would necessarily be enlarged; but, as it is about normal, I would say at once that the liver is not involved. The pain was not such as to indicate pleurisy; and, as the patient has had no cough, nor difficulty in respiration, we can safely say it is not pneumonia.

I should think, when the wheel struck him, it produced sufficient inflammation near the head of the rib to result in suppuration, the pus following along between the pleura and rib, until it could find a point of escape. It has never healed, owing to the denuded state of the rib, or portion of vertebra; most likely the former; nor will it heal until the necrosed or carious portion of the rib is removed, unless the pus changes its course.

The present symptoms are pain between the umbilicus and right hypochondriac region. There also seems to be an irregular contraction of the abdominal muscles. If you were to go directly down at the seat of pain, you would strike the upper part of the psoas muscle. There is already some swelling and tenderness in that part, increased by exercise.

The patient says that he feels so weak, and his back aches so badly towards night, that he can hardly sit up. Says he never had any cough, no headache to speak of. By careful introduction, the probe can be passed under the edge of the rib to its inner surface, and backward towards the junction of the rib with the spine. Patient says the abscess was opened three times, the last time about the first of September. The Doctor first introducing a director into the fistula, and cutting in the direction of the rib backwards. After which, he burned it out with caustic.

In this case, I have no hesitation in regarding its origin as at the junction of the rib with the vertebra. Up to the present time, the patient has kept a very good degree of health; but he says that he has lost flesh within the past two weeks, or since the pain commenced in the abdomen. From the existence of this abdominal pain, it is highly probable that the pus is taking a new direction down the spine, along the course of the psoas muscle. The spasmodic action of the abdominal muscles is evidently due to the irritation of the anterior branches of the lower intercostal nerves.

The disease is evidently caries (either of the head of the rib or of one of the vertebræ, probably the former); and the pus will be more likely to gravitate downward, ultimately appearing in the form of an abscess just below Poupart's ligament, as the symptoms are such as to plainly indicate present irritation and fulness in the upper part of the psoas region.

There are two methods of treatment that might be adopted in this case:—1. The surgical exsection of the rib, for the removal of the diseased bone. 2. The patient may be placed in a horizontal position, inclining a little towards the diseased side, and kept perfectly quiet for four or five weeks, with the

internal administration of tonics and alterative remedies. You would accomplish two objects by this horizontal position, *viz.:* decrease the gravitation of pus downwards, and put the parts at rest. After this, I would recommend a spinal support, which will not admit of any rotary motion of the parts, and exactly the same as that employed in the treatment of any angular curvature; and then the patient may be allowed moderate outdoor exercise.

Laying surgical aid aside, I think this is the only treatment that will be apt to prove beneficial. Without treatment, he will continue to grow worse, and finally have an abscess at Poupart's ligament, becoming more feverish and emaciated daily.

As the attempt to exsect the head of the rib involves a serious operation, and we cannot be certain that the disease does not affect also the vertebræ, we should not advise an immediate resort to that method of treatment. By confining the patient to a strictly horizontal position, keeping the present opening as free as possible, and giving him three times a day a teaspoonful of the following tonic and alterative mixture, it is quite possible that the further extension of the suppurative process would be arrested, with a removal of all pain from the side and abdomen:—

℞. Tinct. Cinchonæ, ---------- ℥ij.
Fl. Ext. Conium, ---------- ℥j.
Bichlorid. Hydrarg., ---------- 1 gr.
Mix.

After this prescription has been used three weeks, he may take in its place the syrup of iodide lime or iodide of iron.

Note.—*February 10th, 1869.*—The patient returned home the day following the above clinic, taking a letter to his physician. The treatment above indicated has been carried out to the present time, and information came from his attending physician two days since, saying that the patient was making good progress towards recovery.

Book Notices.

Practical Observations on the Etiology, Pathology, Diagnosis, and Treatment of Anal Fissure. By WILLIAM BODENHAMER, A.M., M.D., Professor of the Diseases, Injuries, and Malformations of the Rectum, Anus, and Genito-Urinary Organs. Illustrated by numerous Cases and Drawings. New York: William Wood & Co., 61 Walker Street. 1868. 199 pages. Price, $2.25.

Essentials of the Principles and Pactice of Medicine: A Hand-Book for Students and Practitioners. By HENRY HARTSHORNE, M.D., Professor of Hygiene in the University of Pennsylvania, etc., etc., etc. Second Edition, revised and improved. Philadelphia: Henry C. Lea. 1869.

This is a small-sized octavo, of 425 pages, containing an admirably-condensed summary of the principles and practice of medicine. We have always doubted the real utility of such works. That they are a great convenience to students and practitioners of doubtful industry, there can be no doubt; and, as there are many such in the profession, there is an active demand for such works.

We do not hesitate to say that this work of Dr. Hartshorne is the very best of its kind.

We have also received from the well-known publishing house of Henry C. Lea, of Philadelphia, through the hands of Cobb, Pritchard & Co., of this city, the following work:—

Clinical Lectures on Diseases of the Urinary Organs: Delivered at the University College Hospital. By Sir HENRY THOMPSON, Surgeon Extraordinary to H. M. the King of the Belgians; Professor of Clinical Surgery; and Surgeon to the University College Hospital. With Illustrations. Philadelphia: Henry C. Lea. 1869. 204 pages.

The volume contains twelve Lectures on the following topics: —First, Introductory Diagnosis; second and third, Stricture

of the Urethra; fourth, Hypertrophy of the Prostate, and its Consequences; fifth, Retention of Urine; sixth, Extravasation of Urine and Urinary Fistulæ; seventh, Stone in the Bladder; eighth, Lithotrity; ninth, Lithotomy; tenth, Cystitis and Prostatitis; eleventh, Diseases of the Bladder, Paralysis, Atony, Juvenile Incontinence, Tumors; twelfth, Hæmaturia, and Renal Calculus.

A Conspectus of the Medical Sciences: Containing Manuels of Anatomy, Physiology, Chemistry, Materia Medica, Practice of Medicine, Surgery, and Obstetrics, for the Use of Students. By HENRY HARTSHORNE, A.M., M.D., Professor of Hygiene in the University of Pennsylvania, Auxiliary Faculty of Medicine, etc., etc., etc. With 310 Illustrations. Philadelphia: Henry C. Lea. 1869.

In this work Dr. Hartshorne has endeavored to do for all the ordinary branches of medical science what he had accomplished for practical medicine alone, in the work just noticed. In this conspectus we have a carefully condensed summary of all the branches named above, in one volume of 1002 pages. Both works are for sale by Cobb, Pritchard & Co., 81 Lake St.

A Hand-Book on Uterine Therapeutics, and of Diseases of Women. By EDWARD JOHN TILT, M.D., Member of the Royal College of Physicians; Consulting Physician to the Farringden General Dispensary; Fellow of the Royal Medical Chirurgical Society; etc., etc., etc. Second American Edition; thoroughly Revised and Amended. D. Appleton & Co., 90, 92, and 94 Grand Street, New York. 1869.

This is a full sized octavo volume of 345 pages, published in good style, except the type are too small for pleasent reading. The merits of the author are well known; and this edition of his work ought to be in the hands of every practitioner; for the special purpose of counteracting the modern tendency to reduce uterine therapeutics to the knife, the caustic, and mechanical appliances. We commend it to our readers as a book worth buying. For sale by S. C. Griggs & Co., Chicago.

Editorial.

College Commencement.—The public Commencement of Chicago Medical College will take place in the College Hall, 1015 State Street, on the *fourth Tuesday* in March. There will be a public examination of the candidates for Graduation and the *reading* of Theses during the afternoon of the preceding day. The Commencement exercises proper will take place on the afternoon of Tuesday, and will consist in the distribution of Certificates to the undergraduates, the announcement of awards, the conferring of the Degrees, and a Valedictory Address by Prof. J. S. Jewell. Members of the profession, both in the city and the country, are invited to attend all these exercises.

Illinois State Medical Society.—We again remind our readers, that the next Annual Meeting of the Illinois State Medical Society will be held in Chicago, on the *third Tuesday* in May next. Drs. R. C. Hamill, S. Wickersham, Thomas Bevan, E. Powell, and G. C. Paoli, constitute the Committee of Arrangements.

Alumni Association of Chicago Medical College.—The second regular Annual Meeting of this Association will be held in the College, on Monday evening, twenty-second of March, at half-past 7 o'clock. An address will be delivered by the President of the Association, and matter of interest to all will be presented for consideration. Previous to which, it is earnestly to be hoped each *Alumnus* "will address a letter to the Secretary, giving a short history of his professional experience during the preceding year, and stating, at length, anything of special interest that may have come under his observation."

All Alumni of the Institution are earnestly invited to be present, to participate in, and contribute to, the interest of the meeting.

S. A. McWilliams, *Sec'y*,
166 State St., Chicago.

DELEGATES TO AMERICAN MEDICAL ASSOCIATION, ATTENTION.

The undersigned having been appointed a Committee to make arrangements for commutation of fare to and from the meeting of the Association, to be held in New Orleans, on the first Tuesday in May next, would have their work much facilitated if all those who wish to take the most direct, *time-saving* route, (which is by railroad,) will immediately inform the Committee of their wishes. We have ascertained that liberal commutation can be obtained from this city to New Orleans and return, provided a certain number of Delegates and Members will pledge themselves to go.

N. S. Davis,
R. C. Hamill, } *Committee.*
A. Fisher,

Note.—The two principal routes of travel from this section of country to New Orleans are:—1st, All the way by Railroad, with only one *change*, which is at Louisville, and the journey accomplished in two and a half days, from Chicago to New Orleans. 2d, From Chicago to Cairo by Illinois Central Railroad, and thence by steamboat down the Mississippi to New Orleans, which cannot be safely estimated to consume less than *five* days.

The regular fare from Chicago to New Orleans by both these routes is $38.00. From information furnished by railroad agents here, and from a letter just received from Dr. Jas. F. Hibberd, of Richmond, Indiana, it is probable that arrangements can be made for commutation tickets over both these routes.

To complete the arrangements, it is very desirable that all the delegates and members of the Association who intend to go to New Orleans from the North-West, should immediately notify the Local Committee here, specifying the route they would prefer to go.

At a recent meeting of the Chicago Medical Society, the following form of a law was agreed to, and recommended to the

Legislature for adoption, by a nearly unanimous vote. It differs but little from the law now in force in Ohio, and is as follows:—

"An Act To Protect the People of Illinois from Empiricism and Imposition in the Practice of Medicine and Surgery.

"Section 1. *Be it enacted by the People of the State of Illinois, represented in General Assembly,* That it shall be unlawful for any person within the limits of said State, who has not attended at least two full courses of instruction, and graduated at some school of medicine, either of the United States or of some foreign country, or who cannot produce a certificate of qualification from some State, district, or county medical society, composed of not less than twelve active members, and is not a person of good moral character, to practise medicine in any of its departments for reward or compensation, or attempt to practise medicine, or prescribe medicine or medicines, for reward or compensation, for any sick person within the said State of Illinois.

"§ 2. Any person living in the State of Illinois, or any person coming into said State, who shall practise medicine, or attempt to practise medicine, in any of its departments, or perform, or attempt to perform, any surgical operation upon any person within the limits of said State, in violation of section one of this act, shall, upon conviction thereof, be fined not less than fifty, nor more than one hundred, dollars for such offence; and, upon conviction for a second violation of this act, shall, in addition to the above fine, be imprisoned in the county jail of the county in which such offence shall have been committed for the term of thirty days. And in no case wherein this act shall have been violated, shall any person so violating receive a compensation for services rendered: *Provided,* Nothing herein contained shall in any way be construed to apply to any person practising dentistry.

"§ 3. This act shall take effect and be in force on and after the first day of September, 1869."

Individually, we do not anticipate much benefit from legislation of any kind concerning the practice of medicine. If we are to have any law, however, we should much prefer this simple enactment to any other that has been proposed; unless we could have a thoroughly competent Board of Examiners for

the State, selected in some way that would secure the freedom of its members from partisanship, and by whom all persons proposing to practise medicine and surgery in this State should be thoroughly examined, whether they be graduates of some medical school or not.

The Health-Lift—Its Theory and Practice.—This is the title of a neatly-printed and bound monograph, written, we presume, by Frank W. Reilly, M.D., who has charge of a Health-Lift establishment in this city. By Health-Lift here, is meant a regular daily exercise at lifting, for the purpose of developing the strength and health of the physical system. As practised under the direction of Dr. Reilly, it is a decided improvement over the ordinary gymnastic exercises. Regular habitual muscular exercise, as a means of preserving and restoring health, should receive far more attention than has hitherto been given to it.

Errors.—In the February number of the Examiner, Dr. Curtis relates an unusual case of retention or suppression of urine.

In setting up the article, the printers omitted a few words, which made it read, "20 grs. of calomel every three hours." It should have been, a "powder of calomel 4 grs., jalap 6 grs., and cream tartar 20 grs."

On page 89 of the same number of the Examiner, is a prescription which should have been printed ounces instead of drachms.

A Rebellious Case of Aphonia, instantly cured by electrical excitation of the inferior laryngeal nerve, has been communicated by Dr. R. Philipeaux to the *Gazette Medicale de Lyon*, 1868, No. 30.—*Medical Record.*

The Chair of Obstetrics and Med. Jurisprudence in the Mass. Med. College Filled.—Dr. Chas. E. Buckingham, formerly Adjunct Professor of Theory and Practice, has been appointed by the Corporation to the vacant chair of Obstetrics and Med. Jurisprudence in the Massachusetts Medical College. —*Ibid.*

THE NEXT MEETING OF THE AMERICAN MEDICAL ASSOCIATION.—We hope that the approaching meeting of the American Medical Association will be fully attended by members of the profession from the Northern States. The season of the year, the convenience of access to New Orleans by steamboat, and the well-known delightful climate of the lower Mississippi in the spring, are inducements which should alone decide many a hard-worked doctor to take the trip, "and so to interpose a little ease."

The expensiveness of the journey will indeed deter many, and this difficulty, therefore, should be reduced as much as possible. A steamboat could undoubtedly be chartered at Cincinnati or Louisville for the round trip, at a very much less rate per person than for each to go by the usual conveyances. While at New Orleans those who wished could take their meals and sleep on board.

All those who are desirous of entering into this arrangement should send their names and address, and the names of the members of their families they might wish to accompany them, to Dr. WM. B. ATKINSON, Permanent Secretary, No. 1400 Pine Street, Philadelphia, Pa., without delay. Let as many as can, conclude to go, as in this case it is not only the more the merrier, but also the more the better fare and the lower price.

It is understood that unless enough names are received to make this method of taking the journey the cheapest, it will not be adopted.—*Medical and Surgical Reporter.*

THE FUNGUS THEORY OF DISEASE DOUBTFUL.—In a short communication to the *Centralblatt*, Drs. Bergmann and Schmiedeberg describe a crystalline substance, to which they have applied the name "Sulphate of Sepsin," obtained from putrefying materials, and which they believe represents the proper poison of organic substances undergoing this kind of fermentation. It is obtained by diffusion through parchment-paper, precipitation with corrosive sublimate from an alkaline solution, removal of the mercury by silver, of silver by sulphuretted hydrogen, evaporation, and purification of the residue. Large well-defined, acicular needles are thus obtained, which are deliquescent in the air, and, exposed to heat, melt and carbonize. They possess a powerfully poisonous action. A solution containing scarcely more than one-hundredth of a gramme was injected into the veins of two dogs. Vomiting was immediately induced, and after a short time diarrhœa, which in the course of an hour became bloody. After nine hours the animals were killed, and

on examination, their stomachs and large intestines were found ecchymosed, and the small intestine congested. Frogs could be killed in the same manner.—*Lancet, Oct 17, 1868, p. 518.*

A Successful Operation for the Transfusion of Blood was recently performed by Dr. Enrico Albanese at the hospital of Palermo, Sicily. A youth aged seventeen, named Giuseppe Ginazzo, of Cinisi, was received at that establishment on the 29th of September last, with an extensive ulceration of the leg, which in the end rendered amputation necessary, the patient being very much emaciated, and laboring under fever. The operation reduced him to a worse state than ever, and it became apparent that he was fast sinking; the pulse being imperceptible, the eyes dull, and the body cold. In this emergency, Dr. Albanese had recourse to the transfusion of blood as the only remedy that had not yet been tried. Two assistants of the hospital offered to have their veins opened for the purpose, and thus at two different intervals 220 grammes of blood were introduced into the patient's system. After the first time he recovered the faculty of speech, and stated that before he could neither see nor hear, but felt as if he were flying in the air. He is now in a fair state of recovery.—*Ibid.*

A New Urethroscope—and we like the name better than *endoscope*—has been devised by Dr. Langlebert, of Vichy, which can readily be used by daylight, or by the illumination of an ordinary lamp or candle. It is very simple in construction. A full description, with woodcut, appears in *La France Medicale*, 1868, No. 77.—*Ibid.*

Royal Institution.—Dr. Odling, Prof. Chem. at St. Bartholomew's Hospital, has been elected Fullerian Prof. Chem. in this inst. to succeed the illustrious Faraday.

The Academy of Sciences of Paris has received the sum of 60,000 francs, the interest of which will every third year be offered as a prize for the best essay on embryology. M. Serres was the judicious owner.—*Medical and Surgical Reporter.*

Ovariotomy.—Dr. Dunlop, of Springfield, Ohio, since 1843, has performed ovariotomy on 38 patients. Only two were without anæsthetics; and all were by the long incision. Thirteen of his patients were unmarried. Nine died after the operation. Three of the successful cases died of other diseases afterwards;

the rest are all now living, and in good health.—*N. Y. Med. Record.*

To Prevent the Coagulation of the Blood during Transfusion.—Dr. J. Braxton Hicks (*British Medical Journal*) accomplishes this by a solution of phosphate of soda mixed with the blood as it flows from the supplier. The greatest danger in the operation is thus avoided, whilst the solution is in no degree incompatible with the integrity or normal qualities of the blood. —*Pacific Medical and Surgical Journal.*

Solvent for Gallstone and Cholesterine.—Dr. Buckler (*Am. Jour. of Med. Science*) recommends the following prescription in the cholesterine diathesis:—℞. Hydrat. succin. of iron, ʒiss.; water, ʒiss. Dose, a teaspoonful after each meal, to be taken six months, if necessary.—*Medical Record.*

There are so many quacks in London who assume the title of M.D., that the publishers of the London Directory have determined to expunge in future editions of that work, from the list comprising the names of physicians and surgeons, those not registered under the Medical Act of 1858. If our publishers of directories would dare to follow such an example, what a small list of real doctors there would be!—*Medical Record.*

Antidote for Carbolic Acid.—Next to the stomach-pump, in poisoning with this acid, the best antidote is large doses of olive or almond oil, with a little castor oil. Oil is a solvent, and therefore a diluent of carbolic acid, and may be used to stop the corrosive effect of the acid, when its action on the skin is too violent.—*Journal of Cutaneous Medicine.*

Pensions to Widows of Physicians.—The Italian Chamber has passed an act granting to the widows of physicians who fell victims to their calling during cholera epidemics, a pension of from 100 to 200 dollars a year, according to the number of children.—*N. Y. Med. Record.*

Best Book for Everybody.—The new illustrated edition of Webster's Dictionary, containing three thousand engravings, is the *best book for everybody* that the press has produced in the present century; and should be regarded as indispensable to the well-regulated home, reading-room, library, and place of business.—*Golden Era.*

Mortality for the Month of December, 1868:—

Accident, drowned	2	cerebral, and spinal,	1	Meningitis tubercular,	1
" burned,	1	Dropsy,	5	Mouth, canker sore	1
" overdose of morphine,	1	" ovarian,	1	Metro-peritonitis,	1
" jumping fm. window,	2	Dysentery	2	Miscarriage,	1
" run over by		Enteritis,	1	Nephritis, acute,	1
" wagon,	2	Enterocolitis	1	Old age,	5
" R. R. cars,	1	Encephatitis,	1	Œdema, pulmonium, and diphtheria,	1
" scalding	2	Epilepsy	1	Paralysis,	1
Abdominal aorta, aneurism of,	1	Exposure and neglect,	1	Parotitis, and encephatitis,	1
Angina,	2	Fever, puerperal,	4	Peritonitis,	5
Apoplexy,	3	" scarlet,	31	Peritonæum, cancer of	1
Aphthæ,	1	" " malignant,	2	Phthisis pulmonalis,	21
Atrophy,	1	" " & angina,	1	" and pneumonia	1
Atelectasis pulmonium	1	" " & convulsions	1	Pneumonia,	31
Asphyxia,	1	" " & laryngitis,	1	" broncho,	2
Biliary calculi,	1	" " & nephritis,	1	" typhoid,	7
Births, premature,	7	" typhoid,	19	" and diphtheria,	1
" still	37	Gastritis	1	" and old age	1
Brain, congestion of,	6	Hæmatemesis,	1	Phlebites, uterine, and erysipelas,	1
" disease of,	1	Hepatitis,	1	Rectum, cancer of,	1
" effusion into vertricles,	1	" chronic and excitis,	1	Skull, fracture of,	1
" inflammation,	5	" " and dropsy,	1	Stomach, cancer of,	2
" softening of,	1	Heart disease of,	4	" and bowels, inflammation of,	1
" " and old age,	1	" " and dropsy	1	Suicide by pistol shot,	1
Bronchitis,	5	" dropsy of,	1	" hanging,	1
" capillary,	4	" congestion of, and phthisis pulmonalis,	1	" morphine,	
Carditis rheumatic,	1	" organic disease of	1	" from insanity,	1
Chord, umbilical injury of,	1	" hypertrophy of,	1	Small-pox,	2
Cholera-infantum,	1	" valvular disease	1	Tabes mesenterica,	11
" morbus,	1	Hydrocephalus,	5	Tetanus,	2
Childbirth	1	" acute,	1	" and convulsions	1
Convulsions,	40	Hydropericarditis,	1	Teething,	4
Croup,	10	Hydrothorax,	1	Throat, ulcerated sore,	1
" membranous,	3	Inanition,	8	Uterus, hemorrhage of,	1
Debility, general,	2	Intemperance, and exposure,	3	" cancer of,	1
Diarrhœa,	2	Liver, cirrhosis of,	1	Unknown,	1
" chronic,	2	" organic disease,	1	Vitality, deficient,	3
Diphtheria,	6	Lithotomy and urinary infiltration,	1	Varicella,	1
" and angina	1	Lungs, congestion of,	4	Whooping-cough,	6
" and paralysis,	1	Measles,	3	" " and pneumonia,	1
" pneumonia	1	Meningitis,	6	Total,	374
Disease, congenital,		" acute,	1		
		" cerebro-spinal,	3		

Ages.

Under 1	109	20 to 30	27	70 to 80	8
1 to 3	71	30 to 40	46	80 to 90	1
3 to 5	23	40 to 50	23	Unknown,	2
5 to 10	26	50 to 60	10		
10 to 20	14	60 to 70	14	Total	374

COMPARISON.

Deaths in Dec., 1868, --374 | Deaths in Dec., 1867, --409 | Decrease, -- 25
Deaths in Nov., 1868, ---------- 401 | Decrease, ---------- 27

Males, ---------- 203 | Females, ---------- 171 | Total, ---------- 374
Single, ---------- 277 | Married, ---------- 97 | Total, ---------- 374
White, ---------- 368 | Colored, ---------- 6 | Total, ---------- 374

NATIVITY.

Bavaria, ----------	2	England, ----------	11	Poland, ----------	1
Bohemia, ----------	7	France, ----------	1	Scotland, ----------	5
Canada, ----------	5	Germany, ----------	39	Sweden, ----------	8
Native Chicago, ----	71	Holland, ----------	3	Unknown, ----------	2
Foreign " ----	127	Ireland, ----------	46		
U. S., other parts, ---	42	Norway, ----------	4	Total, ----------	374

MORTALITY BY WARDS FOR THE MONTH.

Ward.	Mortality.	Pop. in 1868.	One death in	Ward.	Mortality.	Pop. in 1868.	One death in
1---	7	9,094	1,299	14---	20	14,839	742
2---	15	13,074	871	15---	31	21,078	680
3---	20	15,076	753¾	16---	12	15,465	1,288¾
4---	20	17,796	889¾	County hosp.	7		
5---	22	16,033	728¾	Chi. River,	1		
6---	25	13,083	523⅓	Mercy Hosp.	2		
7---	56	25,492	455 1-5	St. Luke's H's.	3		
8---	28	15,813	564¾	Immigrants	6		
9---	15	19,297	1,286½	Marine Asyl.	2	St. Jo. Orph. Asyl.	1
10---	13	12,925	840½	Soldiers Home	1	Prot. Orph. Asylum	2
11---	20	14,340	717	L. Michigan,	1	Home for Friendless,	7
12---	18	17,485	971½				
13---	19	11,164	587½				

Total, ---------- 374

Mortality for the Month of January, 1869:—

Accidents, ----------	6	pulmonalis,	1	Dropsy of abdomen, --	1
Abscess, lumbar, ----	1	" & capillary	3	Dysentery, ----------	1
Anæmia, ----------	1	Cancer, ----------	2	Endocarditis and convulsions, ----------	1
Angina, ----------	1	Cerebritis, ----------	1	Enteritis, ----------	2
Apoplexy, ----------	3	Cholera infantum, ----	1	Epilepsy, by worms --	1
" and splinetis	1	Convulsions, --------	49	Erysipelas, ----------	3
Aphthæ ----------	1	Croup, ----------	5	" phlegmonous, ----	1
Ascites, ----------	2	" membranous, --	5	" and pyæmia	1
Atelectasis pulmonium	1	" spasmodic, ----	1	Exhaustion, nervous, -	1
Bowels, inflammation,	2	" and diptheria, -	1	Fever, puerperal, ----	4
" cancer of, ----	1	Cyanosis, ----------	1	" scarlet, --------	40
Brain, congestion of, -	3	Cyanche trachealis, --	1	" " and meningitis, -----	2
" " " & scarlet fever,	2	Debility, general, ----	3	" " malignant,	2
" compression of,	1	Diabetes, ----------	1	" typhoid, ------	5
" inflammation, -	5	Diarrhœa, ----------	2	" " and chronic dysentery,	1
Bronchitis, ----------	3	" and indigestion, -----	1	Gangrene, dry, ------	1
" & apoplexy	1	Diptheria, ----------	2	Gastritis, ----------	1
" & emphysema, ----	1	Dropsy, ----------	3		
" & phthisis		" and scarlet fever, --------	2		

Gastritis and phthisis pulmonalis,	1	Lungs, paralysis and congestion of,	1	" broncho,	1
Hæmoptysis,	1	" hemorrhage of, and phthisis pulmonalis,	1	" typhoid,	2
Heart, fatty degeneration, of,	1	Manslaughter,	1	Prolapsus funis,	1
" disease of,	2	Measles and diptheria	1	Scrofula,	1
" organic disease,	1	Metro-peritonitis,	1	" necrosis of, and diarrhœa,	1
" valvular "	2	Meningitis,	5	Suicide,	1
Hepatitis, chronic,	1	" acute	1	Small-pox	1
Hernia, strangulated	1	" cerebro-spinal	6	Spina bifida,	1
Hydrophobia,	1	" tubercular,	3	Stomach, cancer of,	3
Hydrocephalus,	6	Old age,	8	Tabes mesenterica,	8
" acute,	2	Œdema, pulmonium,	2	Teething,	3
Icterus,	1	Parotid glands, infiltration of,	1	Throat, putrid sore,	1
Inanition,	8	Paralysis,	2	Tongue, cancer of,	1
Inflammat'n, peritoneal	1	Pericarditis	1	Tumor, abdominal,	1
Intemperance,	1	Peritonitis,	2	Uterus, cancer of,	2
" and exposure	1	Phthis pulmonalis,	45	" hemorrhage of,	1
" and rheumatism,	1	Pleurisy, and convulsions,	1	Varicella, and pneumonia,	1
Larynx, ulceration of,	1	Pneumonia,	27	Whooping-cough,	7
Laryngitis,	1	" and bronchitis,	2	" and bronchitis,	3
Liver, congestion of,	1	" and convulsions,	1	" and pneumonia,	1
" disease of, and intemperance,	1			Unknown,	2
" induration of,	1			Total,	382
Lungs, congestion of,	1				

AGES.

Under 1	123	20 to 30	19	70 to 80	11
1 to 3	69	30 to 40	36	80 to 90	3
3 to 5	28	40 to 50	28	117	1
5 to 10	23	50 to 60	16		
10 to 20	18	60 to 70	7	Total,	382

NATIVITIES.

Atlantic Ocean,	1	England,	13	Norway,	9
Bohemia,	4	France,	2	Scotland,	2
Canada,	1	Germany,	44	Sweden,	7
Chicago, Native,	81	Holland,	1	Unknown,	1
Chicago, Foreign,	121	Ireland,	36		
U. S., other parts,	57	Italy,	2	Total,	382

MORTALITY BY WARDS FOR THE MONTH.

Ward.	Mortality.	Pop. in 1868.	One death in	Ward.	Mortality.	Pop. in 1868.	One death in
1	3	9,094	3,031	12	30	17,485	583
2	21	13,074	622	13	20	11,164	558
3	17	15,076	887	14	21	14,839	707
4	15	17,796	1,186	15	34	21,078	620
5	26	16,033	617	16	34	15,465	455
6	16	13,083	818	County Hosp.	12		
7	34	25,492	750	Marine Hosp.	1		
8	24	15,813	659	H'me for Fr'ndless,	4		
9	28	19,297	689	Prot. Orphan Asylum,	1		
10	11	12,925	1,175				
11	23	14,340	623				

Total, 382

COMPARISON.

Deaths in Jan., 1869,----382	Deaths in Jan., 1868,----438	Decrease,--- 56
Deaths in Dec., 1868,----------374	Increase, ----------	8
Males, ----------208	Females, ----------174	Total, ---------382
Single, ----------279	Married ----------103	Total, ---------382
White,----------380	Colored, ---------- 2	Total, ---------382

AN AGED PRIMIPARA.—Dr. Cachot, of St. Mary's Hospital, London, recently delivered in that institution a female of her first child, at the age of 53 years, and again in sixteen months. In both confinements the labor was tedious, from inertia of the uterus, and forceps were required. The mammary glands produced no milk, but were enlarged. The children lived in both cases.—*Ibid.*

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THE

CHICAGO MEDICAL EXAMINER.

N. S. DAVIS, M.D., EDITOR.

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Original Contributions.

ARTICLE XV.

RENAL DROPSY FOLLOWING SCARLATINA—SUPPRESSION OF URINE AND CONVULSIONS.—CLINICAL CASES.

BY N. S. DAVIS, M.D., Professor of Principles and Practice of Medicine in Chicago Medical College, and of Clinical Medicine in Mercy Hospital.

There are but few active practitioners who have not found the sequelæ of scarlet fever among the most obstinate and serious ailments that come under their observation.

Among these, none are more important than the renal affections accompanied by anasarca.

As illustrative of the important series of pathological phenomena developed in the progress of such cases, the two following cases are placed on record:—

CASE I. C. K., a girl aged twelve years, previously in good health, was attacked with scarlatina simplex during the last week in December, 1868. Two or three other children in the family had the disease at the time, in one of whom it presented the anginose variety, and I was called to prescribe for it. At the time of my visit to the little boy, the girl was sitting up in the same room, complaining so little that the mother did not think she required medical treatment.

The rash had been well developed on the surface, the fever

moderate, and the case free from any apparent complications. She convalesced, and appeared well until the 15th of January, when her face and limbs began to swell. On the 16th I was called to see her, and found the surface generally pale, and swollen from anasarca; pulse moderately accelerated; skin dry, and little above the natural temperature; head light, or giddy; dull pain in the back, with sense of heaviness and lameness in bending the trunk on the pelvis; bowels inactive; stomach nauseated at times; appetite much impaired; and urine scanty and dark-colored.

On examination, the latter was found to contain a few blood-corpuscles and much albumen, with epithelium, and fibrinous shreds. She was directed to have a saline laxative to open the bowels, to be followed by a prescription containing digitalis, nitrous ether, and iodide potassa, to be taken every three hours.

On the 18th, I saw her again. Her bowels had moved freely, and she had taken the medicine regularly, but there was no marked change in her symptoms.

The urine had not increased in quantity, and was more bloody. From this to the evening of the 22d, she took freely of bitartrate of potassa dissolved in water; continued the digitalis and nitrous ether, and a powder of nitrate potassa, calomel, and Dover's powder at night.

Warm fomentations were also applied both to the loins and abdomen. The anasarca, however, continued slowly to increase; the pulse became smaller and more frequent; the head more dizzy; the stomach more irritable, and the urine more scanty, and more largely mixed with blood. During the 21st and 22d, she passed not more than three or four ounces in the twenty-fours, and it was about half blood.

On the night of the 22d, she was seized with severe general convulsions. Living in a part of the city distant from my residence, a physician in the neighborhood was called in, who ordered a warm bath, followed by fomentations, and the liberal internal use of bromide and iodide of potassa. The convulsions, however, continued to recur at short intervals, until I saw her on the afternoon of the 23d.

The urinary secretion had been entirely suppressed for the preceding twenty-four hours; the face and whole exterior surface of the body and limbs were much bloated; the pulse 130 per minute, small and weak; skin moist, but temperature nearly natural; pupils dilated; and mind incapable of being roused to consciousness. Warm applications to the trunk and lower extremities were continued, and the following prescription ordered:—

℞. Hydrarg. Chlorid. Mite, ---------- 20 grs.
Nitras Potassa, ---------- 30 grs.

Mix, and divide into 4 powders, one to be taken every two hours, until the bowels are freely moved; the operation of the same to be aided by warm salt-water enemas. To act as temporary antispasmodics, ten drops each, of chloroform and fluid extract of Cannibis Indica, were given between the powders. After she had taken three of the powders and one or two enemas, the bowels began to move freely, and the convulsions ceased. Soon after, she passed four or five ounces of turbid urine.

During the night of the 23d, and morning of the 24th, she urinated two or three times, and the bowels were evacuated copiously, but without attention on her part. She was quiet during the night, and at my visit at 10 A. M. of the 24th, she could be aroused to partial consciousness, but was very feeble. She was ordered a solution of bitartrate of potassa and gum-Arabic for a drink, and a powder containing five grains of nitrate potassa and three grains of Dover's powder, every three hours. All other remedies were dispensed with, except beef-tea for nourishment.

From this time the urinary secretion continued to improve in quantity and quality; the skin continued moist; the pulse became slower and more full; and the mental faculties regained their activity. On the 29th, she had progressed so far in convalescence that she needed no further attendance.

CASE II. Miss M., a girl aged 14 years, usually in good health, was attacked with scarlatina simplex January 11th, 1869. The disease ran a very mild course, requiring but little

medical treatment. By the 22d, she seemed quite well again. On the 8th of February was again called, and found her presenting the appearance of a moderate degree of general anasarca, with a dull pain in the loins and head, and scantiness of urine, but no fever. She was directed to have two drachms of the bitartrate of potassa and three drachms of the acetate, dissolved in half a pint of water, and to take a tablespoonful of the solution every four hours. I did not see her again until the 13th, when I was called in great haste. During the preceding night she had been attacked with violent general convulsions.

The prescription made on the 8th had appeared to have very little effect. The bloating of the whole surface had steadily increased, with increase of the pain in the head and back, frequent nausea, and some fever. The urinary secretion had decreased until the 12th, when it became entirely suppressed, and convulsions began the night following. The convulsive paroxysms followed each other in quick succession, allowing only an imperfect degree of consciousness to be recovered between them; the stomach promptly rejected all drinks by vomiting; the pulse was small and frequent; skin cool; pupils slightly dilated; respiration short, but regular, between the convulsive paroxysms. No passage of urine or fæces during the preceding twenty-four hours. A physician had been called in soon after the convulsions commenced, late in the evening of the 12th, who gave the bromide and iodide of potassa freely, but without any perceptible effect. At my visit on the morning of the 13th, I ordered extensive warm fomentations, with a view of promoting the action of the skin, and gave internally a powder of calomel, 5 grains, and nitrate of potassa, 5 grains, every two hours, with 10 drops each of chloroform and fluid extract of Cannabis Indica between. The latter was given more to prevent vomiting than for any supposed antispasmodic influence. The convulsions continued to recur through the day, but at longer intervals; otherwise, there was no improvement in her symptoms, and no evacuations either of urine or fæces. The further use of the powders was suspended, and in their

place Croton oil, suspended in the form of an emulsion, was given, in doses of little less than one drop every hour, until evacuations should occur. When she had taken three drops, a part of which was rejected by vomiting, it began to operate freely upon the bowels. On the morning of the 14th, found her quiet; no convulsions since the evening previous; face, and surface generally, still much bloated from dropsical infiltration; skin cool; pulse small, and 120 per minute; mind dull, but capable of being partially roused to activity; and indications of partial paralysis of the left side.

The bowels had been evacuated freely several times, and she had passed a moderate quantity of urine twice. She was directed to have beef-tea in small quantities for nourishment, and a solution of bitartrate potassa for drink. On the 15th, she was much improved in all respects, except the left arm was completely paralyzed, and the movements of the bowels had continued frequent, with some tenesmus and mucus in the discharges.

The urine was nearly natural in quantity and appearance. She complained of some pain in the paralyzed arm, between the shoulder and elbow.

The following prescriptions were ordered:—

℞. Fl. Ext. Scutellaria, ---------- ℥iij.
Tinct. Digitalis, ---------- ℥j.
Iodide Potassa, ---------- ℥iij.

Mix. Dose, one teaspoonful in sweetened water every four hours. Also,

℞. Ol. Terebinth., ---------- ℥ij.
Tinct. Opii, ---------- ℥ij.
Pulv. G. Acacia, } āā, ---------- ℥iij.
Saccha. Abla., }
Rub together, and add
Spts. Nit. Dulce, ---------- ℥iss.
Mint-Water, ---------- ℥iss.

Mix. Dose, one teaspoonful every four hours, alternating with the other prescription, until the dysenteric irritation of the lower bowel ceases.

The use of the latter prescription was required only three or four times, and the patient improved steadily from day to day, until the anasarca, the paralysis, and nearly all symptoms of disease had disappeared. From the 18th to the 24th, the patient was cheerful and active in mind, appetite good, bowels regular, strength improving, and all the appearances of returning health. But there remained some anasarcous puffiness of the face and lower extremities, and the urinary secretion was unsteady. Some days it was natural in quantity and appearance, others smaller and turbid.

She was confined to the use of light food, subjected to no injudicious exercise or exposure to atmospheric changes, and during the period last named took only mild diuretics and tonics.

Yet, on the 25th, she became dull, more anasarcous, and the stomach irritable, with only a slight discharge of very high-colored urine; and before the next morning convulsions again came on as violent as in the first attack. The same means were resorted to as in the first attack, with the addition of a vapor-bath, and the omission of Croton oil; the powders of calomel and nitrate of potassa operating freely. The convulsions again ceased on the procurement of free intestinal evacuations and the return of renal secretion.

But her subsequent progress to recovery has been very slow and vacillating, and is yet imperfect.

In a practice extending over a period of more than thirty years, during which I have seen a fair proportion of scarlet-fever patients, and have often seen some degree of renal dropsy as a sequel, the two foregoing are the first cases that have occurred in my own practice, of complete suppression of urine and convulsions following this much-dreaded fever. Both these cases occurred after the mildest grade of fever, and in spite of some directly preventive treatment. And neither seemed to be benefited by any remedies except such as aided in the elimination of the retained elements of urine, by promoting the action of the skin, kidneys, and bowels.

ARTICLE XVI.

A SINGULAR CASE OF PURPURA AND TETANUS.

Extract from an Inaugural Thesis presented to the Faculty of Chicago Medical College for Session of 1868–69. By EDWARD R. KITTOE.

As you will see by the heading, I intend to proffer as my thesis a report of a singular case of purpura and tetanus, which I had the good fortune to see and watch from the first attack to the final recovery, during the first year of my study with my preceptor, which happened to be my father, and I made it a part of my study to visit with him some of the most important cases which came under his care. The one I now intend to give a report of, struck me at the time as being one of peculiar interest, and I wanted him to keep a record of it and make a report to some of the medical journals, but he neglected to do so, and I now take it up to lay before you, as I remember it, with the few notes I have been able to collect from the patient's father, as well as those of my preceptor. It was as follows: Philip Bolinger, aged 9 years, had what appeared to be a small pimple on the lower eyelid of the left eye, his father punctured it, and there escaped a small drop of pus; a few hours after it commenced to bleed very freely. Having tried in vain to arrest the hemorrhage, by all the means they had at hand, my preceptor (Dr. E. D. Kittoe) was called in. He found a clot of blood about the size of an ounce ball, which, on being touched, blood appeared all over it in drops like dew. He removed the clot and applied some Monsel's styptic on cotton, but with no effect. He applied successively, tannin, alum, kino, agaric, nitrate of silver, etc., etc., with no benefit. It being impossible to apply pressure with any direct force upon the wound, a bandage was passed around the head, with a compress, over the temporal artery. This appeared to answer the desired purpose for about twenty-four hours, at the end of which time, there being much tumefaction of the face and scalp of the affected side, with an erysipelatous blush, it was deemed unsafe to continue pressure any longer. Upon removing the

bandage and dressings, blood immediately began to ooze out around the coagulum, which had gradually increased until now it was the size of a hen's egg, flattened out by the pressure. Upraising carefully the edge, blood streamed out rapidly, and he found that there was a slough involving nearly two-thirds of the eyelid. He then removed the entire clot, and endeavored to staunch the blood by styptics once more, but with very poor success. He then tried the application of ice water, by the way of irrigation, by means of a fruit can, with a minute hole in the bottom, suspended so as constantly to drop on the part affected. In the meantime the boy was put upon tonic treatment. There had appeared on various parts of his body, petechia. He was directed to take quinia sulph. gr. ss.; tr. ferri chlo. min. xx.; vini rubri ℥ss., every three hours, with beef essence, chicken soup, etc., *ad libitum.* After about twelve hours the ice-water treatment failing to arrest the bleeding, and the slough appearing to increase, recourse was had to Peruvian bark, and powdered charcoal mixed quite stiff with yeast, and applied to the wound. On the removal of the fourth poultice the entire slough came away, leaving a clean granulating surface, with a very minute arterial jet near the centre. This was grasped with a pair of Liston's artery forceps, and pretty effectually twisted, after which no further hemorrhage occurred, and the boy recovered rapidly. In about six weeks from the first attack of hemorrhage, he got a slight scratch on the temple on the same side, the bleeding from which was almost as unmanageable as at the first, but was controlled mainly by large doses of tinct. ferri chloridi, 25 drops every four hours, with port wine. Styptics, and pressure were again tried, but but with no avail. The bleeding was evidently controlled by the tinct. ferri. There was at the time profuse hemorrhage from the gums, but no appearance of petechia on any part of the body. The iron and wine together, with nutritious food, was continued for several weeks, when the boy appeared to recover perfectly his color and health.

About the 9th of December following this, (the first attack being in July,) he fell down stairs and cut his hand across the

ball of the thumb, with a piece of glass. It was tied up, and gave no inconvenience until the third or fourth day, when it became painful and commenced bleeding very profusely. My preceptor was at once called on, and again tried the use of styptics, but with no success. He also placed a compress of cork over the radial artery, which did partially control the bleeding, but immediately a large slough began to form about the cut, and a very considerable coagulum, about the size of a hen's egg, formed over the first incision. This clot had very much the appearance of fungus hæmatodes, the blood oozing from it at innumerable points. He removed this once or twice and applied dry lint, which would appear to keep it in check for a time, for several hours. However, this was soon abandoned for the bark, charcoal and yeast, with the tinct. ferri, 25 drops every three hours, which again had the effect to check the sloughing, and eventually the hemorrhage. (I should also mention that he tried at this time the use of bromine and also carbolic acid, but without benefit.) Now came on another phase of the case. My preceptor was called in the night to see his patient, the father stating that the boy was in a "fit." On arriving at the house, he found that he had a regular attack of tetanus. The jaws were tightly clenched, and the spasms, which came on in paroxysms, were terribly severe. Perspiration poured from every pore, and the whole appearance of the child was distressing in the extreme. He at once gave him the sixth of a grain of morphine, and directed the same quantity to be given at intervals of an hour, until relief was afforded; to continue the wine, with a teaspoonful of tinct. cinchona comp., every three hours. After a lapse of twenty-four hours, no benefit appearing to arise from these means, and the spasms being perfectly terrific, the dose of morphine was increased to one-fourth of a grain, in combination with valerianate of ammonia, ℥i, repeated every hour; porter or lager beer *ad libitum.* The spasms continued with great severity for sixteen days, and the dose of morphine was eventually increased to half a grain every two hours. The bowels were kept open by enemas of mutton or chicken broth, administered every second day. At

one time he tried bromide of ammonia, with no effect; also the bromide of potassa, with similar results. The spasms, after the sixteenth day, began gradually to subside, and after a lapse of twenty-six days left him entirely. The hand healed kindly during the first three or four days of the attack of tetanus, and the boy recovered rapidly.

There appeared to be a peculiar hemorrhagic tendency about this case. He is of a leucophlegmatic temperment, rather large, and somewhat fatter than usual for boys of his age. His mother died of phthisis pulmonalis. He had had an attack of scarlatina auginosa, about three months previous to the first attack of hemorrhage, but there was none of the sequelæ common in such cases, although he was much enfeebled by the disease, and continued peevish and fretful. The scarlatina, I am inclined to believe, acted as a predisposing cause to the purpura. Wood mentions it as one of the causes that sometimes produce the disease, and in this case it seems very plausible to consider it so, as previous to the attack of scarlatina there was none of the tendency to hemorrhage, but immediately after, the father noticed a tendency to ecchymosis upon the child's receiving the least bruise, so that I am led to believe that the purpura really followed immediately after, but was not discovered until the hemorrhage took place.

The pimple, as the father supposed it to be, I believe was one of the petechial spots in the form of a bloody blister, and that he was mistaken in regard to the escape of pus from it when he punctured it, as he was not aware that there was any petechia upon the body of the child until my preceptor showed them to him. There was but one crop of them, for as soon as the hemorrhage appeared they ceased to show themselves. At the time of the second attack, the child appeared to be in good health, with the one exception that there still remained a slight tendency to eccymosis, but upon his receiving the scratch upon the temple, the tendency to hemorrhage of the same severe form again showed itself. Of course, as would be naturally supposed, after the child recovered from two severe hemorrhages of fourteen days each, he was very much debilitated, and almost

bloodless, for I have seen him loose almost a pint of blood at one dressing of the wound, the hemorrhage was so severe. He was, I think, the whitest piece of humanity I have ever seen. The third attack, which was only about two months after the second, hardly time for him to regain his strength, was, as I have said, caused by a slight cut from a piece of glass. The same hemorrhagic tendency still remained, and was equally as unmanagable, and, like its predecessors, lasted just fourteen days. Then came the attack of tetanus as soon as the hemorrhage was stopped and the hand began to heal. The cause of which was, without a doubt, the debility arising from the hemorrhage. In the paroxysms he ground out two of the back teeth of the left side and bit his tongue fearfully, the blood from which formed in a pretty firm clot, so that it had to be removed by a pair of forceps, for fear of its suffocating the child, and I am sure that any one would have thought just as all who saw him, that he could not possibly live through these spasms, now that he was so reduced, and yet they continued in their most severe form for sixteen, and in all twenty-six days, when, as I have said, the child recovered, and is now as healthy a looking boy as one might wish to see.

There is one or two things in the treatment of this case worth notice. First. I have neglected to say that the wounded hand and arm were put in a bowl of warm water as soon as a spasm came on, and it afforded great relief. Second. The cessation of the hemorrhage, upon the application of the bark, charcoal and yeast poultice, after having resisted all other known means; and Third. The benefit derived from the very large doses of tinct. ferri chloridi, which seemed to be the only means of checking the hemorrhage. He took as much as 25 drops every three hours; besides this the enormous quantities of wine and whiskey, as well as quinia and morphine, all having the desired effect.

The recovery of the patient seems to me almost a miracle, and is at least very remarkable. It is one of those cases that go to show us how much our patients will go through and still recover, and that while life still remains, we may yet hope

to afford relief, or even better, see our patient recover his health entirely, a pleasure which to the medical man is so great that none but those who have experienced it can realize the joy it affords him. He feels, in such a case, that he has gained the great object that prompted him to study medicine, that of relieving his fellow-creature from suffering, or, as it were, rescuing him from the grave. A man who gains such triumphs as this over the greedy hand of death, has in my mind the most noble calling God has given to any of his creatures.

Foreign Correspondence.

ALLGEMEINEN KRAUKENHAUS,
Vienna, January 26th, 1869.

CHICAGO MEDICAL EXAMINER:—It is scarcely necessary for an American to come to Vienna to learn surgery; not only because it is well taught at home, but because it is scarcely better taught here. The student, however, can here enjoy more advantages by means of private courses, which he cannot at present in Chicago, to the same degree, but which might be more fully extended to him there. Too much cannot be said, perhaps, in praise of Prof. Billroth for his investigations and discoveries in Physiology, Pathological Histology, etc., which alone rank him among the first of men in medical science. As an operator, he is probably only to be numbered with others.

The Department of Surgery is taught by Profs. Billroth and Baron von Dumreicher, who have charge of most of the surgical wards.

Each of the wards has about eighty beds. Each of them gives a clinic an hour and a half long five days in the week, in separate auditoriums, at the same hour. Each Professor has two Assistants, who live in the hospital, and correspond to our House Physicians, except that they are paid for their service, and are allowed to perform some operations. Besides these, there are six operating pupils, who are allowed "inside the ring" for the especial purpose of fitting themselves for sur-

geons. They are required to pass an examination for the position, and can hold it for two years.

While, however, they enjoy this great advantage themselves, they cut off many benefits from the students. They closely surround every patient laid on the table, whether their services are needed or not, and often so obscure the operation, as to make it of little benefit to the students. I often wonder why it is not corrected.

The out-patients or ambulants are first attended to, who range in number from four to twelve daily.

Candidates for graduation are called, per list, into the ring to examine the patients, give diagnosis, prognosis, treatment, and sometimes to perform unimportant operations, as opening an abscess, etc. Each has one or more cases, according as they are trivial or important. The student is often subjected to a pretty close quiz. In this way, I presume, the Professor understands very well the attainments of each student, and his fitness for graduation at the final examination.

A similar plan introduced into our schools somewhat more generally, would tend, I should judge, to excite a somewhat more thorough study on the part of the student, as every one is more or less chagrined to make a failure before the class.

The supposition, that when young men are old enough to commence the study of medicine, no stimulus is necessary, except the vast and interesting field before them, is somewhat Utopian, as it often fails to produce well-read men; especially when the standard for graduation is as low as in many of our schools.

After the ambulants are dismissed, patients from the wards, requiring more important operations, or illustrating more complicated treatment, are brought in for operations. These number from one to four daily. After the clinic, we often look hastily through the wards. Prof. Billroth gives, also, a private course in Theoretical Surgery.

There is also a private course given by one of the Assistants on bandages, in which each student is allowed to apply the different varieties on the living subject.

Another is given on Minor Surgery, treatment of ulcers, etc.

Another on dislocations and fractures, with the applications of splints and other apparatus.

Another on Orthopœdic Surgery, which I understand is almost wholly theoretical, few or no patients being used. I may say, in this connection, that a course is also given on the medical and surgical treatment of the urinary organs; which, however, I understand, is not very valuable.

Courses are also given by the Assistants on Operative Surgery, when the student makes all the ordinary operations on the cadaver.

Prof. Patrubau, who formerly occupied the chair of Physiology, Anatomy, etc., at Prague, but lost his position in 1848, I think, and again in 1852, by joining and leading the Liberal party against the army and Government, gives a course on Topographical Anatomy, with its relations to surgical diseases. It is thought that he may regain his position, and become professor of this subject in this University.

I may add, in conclusion, that many and all of these private courses are not necessarily continuous, but ordinarily depend upon the formation of a class of ten or more individuals. Private courses, in general, here, are supported almost entirely by foreigners. Several private classes I've been in, were composed largely of Americans; and but for them, some of the courses would scarcely have been given. The majority of Austrian and Hungarian students content themselves with the regular courses.

The ordinary duration of private courses is from five to six weeks, with three to five clinics per week. For some of the courses the foreigner enjoys the privilege of paying a double price, which would seem a poor policy to attract foreign students. F.

I adjoin the outlines of a case of lithotrity, which I saw some time since, as illustrating what accident may happen to the most skilful:—

A young man of full habit was admitted to the hospital

on Wednesday, with the ordinary symptoms of stone. On Thursday, was brought before the Class, and the sound revealed the existence of a stone of an inch or more in diameter. On Friday, was again brought before the Class for operation. The lithotribe causing considerable pain, he was given chloroform. The stone was with some difficulty seized, and a part of it crushed, some of the fragments being brought or washed away. For some reason, the operation was not completed, and the patient returned to his bed. In the course of twenty-four hours he was suffering intense pain, which soon increased to almost a mania, and Saturday evening he died.

Post mortem revealed cystitis, pericystitis, and peritonitis, to an extreme degree, with a perforation of the bladder posterior to the prostate. No fragment was found outside the bladder; and whether the perforation was made by the stone or instrument, was not decided.

I've seen this operation several times here, but none of lithotomy. F.

Proceedings of Societies.

CHICAGO MEDICAL SOCIETY.

Friday Evening, January 29, 1869.

The Society was called to order, President Marguerat in the chair.

Secretary Macdonald read the minutes of the last meeting, which were duly approved, after slight modification by Dr. Davis.

The name of Dr. Bosley was proposed for membership by Drs. Seely and Clarke; also, Dr. W. M. Jackson, by Dr. Powell. Referred to Board of Censors.

Dr. Seely opened the discussion on the "Pathology and Treatment of Saccharine Diabetes." Is of the opinion that the term Glucohemia would be the best to signify the presence of sugar in the blood. Stated that it has been shown that the

sugar formed in the liver is consumed by the lungs. Thinks sugar is also formed in the stomach; and the collection of sugar in the urine is due to its not being consumed by the lungs. Is of the opinion that the alkaline treatment is the best that has been advocated to diminish the amount of sugar in the urine. Has read some statements published by Mr. Day, in which he recommends the use of the peroxide of hydrogen. Cited one case which recovered in seventeen days.

Dr. Schmidt says, according to late experiments, it has been shown that there is no sugar to be found in the liver, nor hepatic veins, during life; or, at least, it cannot be detected upon immediate examination after life has become extinct. Other experiments showed, that if the femoral arteries were compressed, that sugar was formed; and hence they came to the conclusion that diabetes was due to paralysis of the nerves supplying the arteries, and a ferment in the blood. Has heard of cases treated successfully by the application of streams of water down the spinal column. Is of the opinion that arsenic is a valuable remedy in this disease.

Dr. Loverin asks if diabetes may not occur from nervous debility? If so, the treatment most appropriate would be tonics.

Dr. Davis remarked, that he had been very much interested by what had been said, and that he had never been satisfied with Bernard's experiments; and thinks that the more recent experimenters have failed to show or prove the source of the sugar, although they have thrown some light on the subject. He has noticed that punctures of the brain, or particularly of the medulla oblongata, have been followed by saccharine diabetes. Also, that strychnia and chloroform, used internally, have been followed by the same results. Says there was a doctor called on him that evening, who has been suffering from saccharine diabetes for some months, and who attributes the cause to the excessive use of strychnia.

Dr. Davis says, he does not think that nervous debility, nor even paralysis, can produce this disease, as we have a great many examples of great exhaustion from masturbation; also, paralysis and hemiplegia; and but very seldom any increase of

urine. Hence, thinks it will not do for us to attribute the cause to debility of the nervous system. Thinks that the origin of the production of sugar is due to deficient action in some of the systemic and pulmonary capillaries. Says his confidence has been shaken in all remedies except such as promote assimilation. Hence, recommends the acetated tincture of calves' rennet, two drachms of which may be taken at each meal. Cited the case of a little girl who had saccharine diabetes some five years since, and who was successfully treated by "Haughton's Pepsin;" the patient not having shown any signs of the disease since. Has been in the habit of using liquid rennet, ℥j., dose before each meal, and

℞. Pulv. Opii,---------- gr. ss.,
Cupri Sulphus,---------- gr. ⅙,

after each meal, with good diet, avoiding starchy vegetables. Cited case of woman on West Side who was treated this way; and in two months hardly a trace of sugar could be found in urine, and has been entirely well for ssveral months. Noticed an article in the *New Orleans Medical Journal*, where bran bread and meat diet were highly spoken of, avoiding all starchy vegetables. Thinks we have yet to trace out the source of the sugar. Says if strychnine is capable of producing diabetes, it may still be beneficial in the treatment, if administered in medicinal doses. Cited cases where atrophy of the limbs was followed by an overdose of strychnine.

Dr. Paoli highly favors the vapor-baths in treatment of diabetes. Cited case of a woman who seemed to be benefited by the baths, but who, after a protracted illness, died.

Dr. Seely says that the pepsin has been used in France, but it is not considered a very efficient remedy. Thinks, with Dr. Davis, that nervous debility is not productive of the disease. Is of the opinion that the peroxide of hydrogen is worthy of trial.

Society next proceeded to Reports of Cases.

Dr. Paoli reported case of Swedish woman whom he was called to see at 10 P. M. last Saturday. The woman had been in care of a midwife, and was delivered of a small child at 3 A. M. Hemorrhage continuing from time of delivery until he

was called. Found patient lying on her side; head high; pulse feeble, and greatly prostrated. Placed a pillow under her hips, and gave a teaspoonful of turpentine, and produced friction over abdomen. Pulse soon began to improve, and all hemorrhage ceased.

Passed to Miscellaneous Business.

Dr. Davis proposed next subject for discussion:—"What is the active agent that produces convulsions in uræmic poisoning, and the most reliable treatment?"

Drs. Schmidt and Paoli were appointed to open the discussion, two weeks hence.

Dr. Davis thinks it in the power of those present to make these meetings interesting, and suggests that every member read upon the subjects proposed for discussion, and be prepared to give their experience; thus benefiting each other.

Members present: — Drs. Marguerat, Macdonald, Davis, Paoli, Loverin, Grosbeck, Guerin, Fredigke, Schmidt, Seely, Wickersham.

Society adjourned.

FRIDAY EVENING, February 5, 1869.

The Society was called to order by the President, Dr. Marguerat.

Secretary Macdonald read the minutes of last meeting, which were duly approved.

The President remarked that there were two members to be elected to-night.

Dr. Paoli recommended that the election be postponed until next meeting.

The name of Dr. William T. Johnson was proposed for membership by Dr. Fisher.

Under call for Pathological Specimens,

Dr. Holmes presented an ossified crystalline lens, which had been shaking around loosely in the anterior chamber of the patient's eye for a period of five years. It was removed at the patient's request, as he had suffered considerable pain. The sight of the eye was lost, as it was the result of a blow.

Dr. Bogue asked if the anterior chamber was filled after the extraction?

Dr. H. says it was, preserving the rotundity of the eye.

Drs. Paoli, Quales, and Marguerat participated in the discussion.

Dr. Bogue presented a specimen, the result of conception. During the hemorrhage, the mass was partly held by the contraction of the os uteri. The sac was ruptured on his hand, and he says that he does not think there was anything but fluid escaped. Between the amnion and chorion found quite a large blood-clot. The question is, What has become of the fœtus? There was no appearance on either side of the attachment of the cord. Judges the patient to have been in about the sixth week of pregnancy.

Dr. Paoli asked if the fœtus did not pass off with the coagula?

Dr. Bogue was of the opinion that it was absorbed.

Dr. Fisher says he has seen a similar case, although rather larger, where there was no fœtus.

Dr. Marguerat also reported having removed a sac size of a pigeon's egg, containing a clear fluid, at the third month of pregnancy.

Dr. Bogue presented, for Dr. Hutchinson, a portion of a tape-worm, containing the head. Does not know what the Doctor used to cause its expulsion.

Dr. Paoli remarked, it was rare to see the head, but the tail is often seen.

Dr. Holmes asked if there were more tape-worms in this country now than common?

Dr. Trimble says that he has not seen many cases of late years.

Dr. Wanzer spoke of their being more common in warm climates—California. Said he lately expelled one from a man on the West Side, which the patient thinks was 200 feet long. The successful remedy was the ethl. oil of male fern, in 30-drop doses. Says he employed other remedies without benefit.

Dr. Bogue reported the case of a woman who had taken $\frac{1}{4}$ of

a grain of atropia in solution, by mistake, supposing it was morphine. As soon as swallowed, there was a severe burning sensation in the stomach. Saw her in twenty minutes after, and gave an emetic, which operated immediately; in the mean time, there was considerable twitching of arms and legs, which began to pass away, together with the pain, in the course of half an hour. Next morning, the patient had some difficulty in seeing. The question is, Was it a poisonous dose?

Dr. Paoli thinks that a quarter of a grain would usually prove fatal, as the dose is from $\frac{1}{30}$ to $\frac{1}{60}$ of a grain.

Dr. Holmes also concurs in the opinion of Dr. Paoli. Related case of a lady who took $\frac{1}{2}$ grain, but vomited immediately after. He usually gives about $\frac{1}{100}$ grain at dose, internally. Thinks morphine and strong coffee the best antidotes.

Dr. Macdonald says that he gave a little boy of two years, who was suffering from incontinence of urine, $\frac{1}{12}$, increased to $\frac{1}{4}$ gr. ext. belladonna, for two weeks and a half, without symptoms of its toxic effect.

Dr. Bogue thinks, when a small portion of atropia is combined with morphia, adds very much to its anodyne influence, the effects continuing much longer than when the morphia is given alone. As an antidote, he prefers strong coffee to either whiskey or opium.

Dr. Bogue asked if $\frac{1}{4}$ g. ext. belladonna was not a pretty large dose for a child?

Dr. Marguerat says that Brown-Séquard records cases where he has given it in grain-doses in pertussis of children, having the effect to temporarily paralyze the fauces.

Dr. Paoli thinks it was commenced in $\frac{1}{8}$-grain doses, gradually increased to *one* gr.

Dr. Adolphus thinks it very dangerous to give one gr. at a dose.

Drs. Tucker and Wanzer participated.

Dr. Paoli spoke of having used the chloride of quinia in $\frac{1}{8}$-gr. doses in the treatment of five cases of malignant scarlet fever, with very beneficial results, reducing the pulse very rapidly. Asked the experience of the Society in its use.

Dr. Quales said he had heard it recommended in membranous croup.

Dr. Quales reported case of miscarriage. Patient was in hands of a midwife, and when he was called the hemorrhage was severe. The placenta was very large, and indurated. Fœtus some two months old.

Dr. Trimble reported a *rare* case of fracture of 5th metatarsal bone, from a sudden fall of the patient while skating. The sensation imparted to the young man at the time of fracture was that of an acute pain.

Dr. Bogue remarked, that fracture of the 5th metatarsal bone is of exceedingly rare occurrence, especially by turning of the foot.

Dr. Wanzer says he has rather a lengthy report on amputation of the shoulder-joint, but prefers to read it at the next meeting.

Society then proceeded to Miscellaneous Business.

Dr. Paoli presented copies of the Ohio and Illinois Laws governing the practising of physicians, which the Secretary read. Dr. P. then moved that a Committee of three be appointed to report on these laws at next meeting. The President appointed Dr. Davis Chairman, and Drs. Paoli and Trimble Associates.

Members present:—Drs. Knox, Marguerat, Macdonald, Davis, Bogue, Trimble, Paoli, Quales, Wanzer, Fisher, Tucker, Adolphus, Holmes.

Society adjourned.

Friday Evening, February 12, 1869.

The Society was called to order, President Marguerat in the chair.

Secretary Macdonald read the minutes of the last meeting, which were duly approved.

The Board of Censors reported favorably in the cases of Drs. Bosley and Johnson. Society then proceeded to ballot, Drs. Bosley and Johnson being duly elected as members of the Society.

Under call for pathological specimens, Dr. Fenn presented a salivary calculus extracted from Wharton's duct.

Society next proceeded to the discussion of the subject chosen at last meeting, *viz.:* "What is the active agent that produces convulsions in uremic poisoning, and the best treatment?"

Dr. Schmidt opened the discussion, by saying that he had gone through a great deal of literature on the subject, and has found that most European authors refer to American authority, especially Dr. W. A. Hammond's work; but says that experiments have shown that not a single substance of the urine would produce uremia except urea, which had to be injected in very large quantities in order to produce the symptoms.

Says he has a patient under treatment at present at the Jewish Hospital, who has some fifteen fistulas, the urine flowing from all. He opened the fistula and introduced a catheter. Patient had chills and headache, which symptoms were mitigated for several days by the administration of hydrochloric acid.

Dr. Paoli says that uremia exists in albuminuria, and is occsioned by the blocking of the ureters. Asked Dr. Schmidt if he tested the urine for albumen? Dr. S. replied that he had not.

Thinks albumen is present in the urine of nearly every pregnant woman at the 7th or 8th month.

Dr. Paoli says he now has a case presenting symptoms of uremic poisoning. The patient is an old lady, and her bladder does not contain more than a tablespoonful of urine. Specific gravity, however, is about normal. Has been giving nitro-muriatic acid, which seems to give some relief.

Cited a case in cholera-time of a young man who did not pass any urine for four days, still there were no symptoms of uremia. Dr. Trimble saw the same case. Patient died in a comatose state. Thinks it is evident that urea is found in the kidney, and not in the blood.

Dr. Schmidt says he was called some ten years since in consultation with two other doctors. Patient was a man of 35,

and had been suffering from amaurosis. When he arrived, found the patient in a dying condition. Had been gradually losing his sight for three weeks, but had continued to work up to within two days. Pulse was weak, but all the functions seemed to be normal. Found a large tumor on the right side. Asked his wife in regard to the voiding of his urine. She said when he became excited, he would pass urine a half an hour at a time. Patient died that night. Found the right kidney to consist of a sac as large as my hat, while the left was very much enlarged, and fatty.

Dr. Gray reported the case of a young man who injured his hand. Three weeks after, tetanus set in. Applied turpentine and belladonna to spine by means of a cloth being saturated, over which he placed a warm flat-iron. Gave internally chloroform gtt. x. every fifteen minutes, during the time of which there was no spasm. Then resorted to bromide of potassium, in 20-grain doses, every two hours, without effect, as the spasms again recurred. Patient died in three days; and, although he had not passed water or anything from his bowels for 24 hours, upon the introduction of the catheter his bladder was found perfectly empty.

Dr. Fredigke says he has noticed an account of five cases of tetanus in the *London Lancet*, four of which recovered under the use of Calabar bean.

Dr. Foster remarked, that there is a horse-doctor in the city who gives hydrocyanic acid, in from one to two drachm doses, in the treatment of tetanus in horses. Also, tincture of aconite-root, in 20-drop doses, with very good success.

The Secretary then read the report on the Medical Bill, and it was moved and seconded that the bill be accepted.

* * * * * *

Dr. Wickersham said that the bill presented was free from the objections of the one he opposed. Thinks it will start legislation for the protection of the people, and moves it be adopted, although it is borrowed from the Ohio bill.

Dr. Paoli says that he is sorry that the Society did not appoint Dr. Wickersham Chairman of the Committee to report on

the bill, and says that the reason for adopting the Ohio bill is because it is more practical than the one originally proposed.

Dr. Reid thinks it necessary to appoint a Board to examine those who desire to practise, and recommends the appointment of separate Boards, Homœopathic, etc., to examine those of their own school.

Dr. Trimble says he thinks the remarks of Dr. Reid very appropriate, in order to make the bill more practicable.

Dr. Wickersham says he does not favor any such project.

Dr. Davis says that what ought to be done is the appointment from the profession of a Board whose duty it would be to examine every person desiring to practise medicine, diploma or no diploma; and says there was a period when two-thirds of all the States of the Union had such organized Boards. Thinks, however, if we ask for a Board, appointed by competent authority, the Legislature would not pass any such laws.

If the Board were appointed by the Governor, it would be nothing but a football in politics, and the Board would be made up of anything but what we want; and it would amount to about the same if the judges of courts had the appointment of Boards. Hence, does not believe there is any use in going outside of the profession for a Board. Not being able to do this, we next aim to have educated men in the profession. Thinks that if the Society do anything, they would do well to adopt the law, and recommends that a Committee of three be appointed to get the bill put in print, and send it to the Legislature, with the request that they accept this bill in place of the one proposed, as the opinion of this Society.

Dr. Davis recommended subject for discussion two weeks from to-night—

"Pathology and Treatment of Scarlet Fever."

Drs. Tucker and Guerin appointed as disputants.

Members present—Drs. Marguerat, Macdonald, Davis, Paoli, Bogue, Wickersham, Schmidt, Trimble, Reid, Tucker, Ray, Fisher, Loverin, Quales, Hutchinson, Baxter, Gray, Bridge, Foster, Guerin, and Fredigke.

Society adjourned.

CARROLL COUNTY MEDICAL SOCIETY.

The second regular meeting of this society was held in Lanark, on the 23d of February, ultimo.

Dr. John L. Hostetter, President elect, presiding.

Minutes of previous meeting were read and approved.

Dr. N. Stepenson, of Thomson, read a paper on the nature of the action of chloroform as an anæsthetic agent.

This was a very able production, and showed that the Doctor has been a very close observer of the action of this article. He advanced some very correct ideas as to its peculiar action in some cases, and gave some very excellent advice as to the mode of administering this agent.

Dr. J. Haller, of Lanark, read a paper on the action of gelseminum sempervirens, but modesty will not allow any comment upon our own paper.

Some of the members having been requested to read papers asked for further time.

There was considerable discussion on some of the ideas set forth in the papers read, which passed off very agreeably to all. This is what we want, *viz.:* free expression of views, and reports of our experience in these matters. By so doing we will be enabled to combat disease more successfully, and make the practice of our noble profession more pleasant.

Dr. Hostetter not having a paper prepared on medical ethics offered a verbal report, in a few well-timed words, to wit:—"Labor diligently and unitedly for the good of suffering humanity." "In all things whatsoever ye would that men should do to you, do ye even so to them."

The following were requested to read papers at our next meeting (and also those who did not read at this meeting are requested to be prepared at our next):—

On obstetrics, Dr. Jno. L. Hostetter, of Mount Carroll.

On the etiology and nature of "shock," Dr. N. Stephenson, of Thomson.

On motion of Dr. J. Haller, it was decided to hold the next meeting of this society in Mount Carroll, on the second Tues-

day of June next, at 10 o'clock A.M. We hope to see a good attendance at that time. All members of the press and clergymen favorable to a *rational* system of medicine are invited to meet with us.

JNO. L. HOSTETTER, *President.*
J. HALLER, M.D., *Secretary.*

WAYNE COUNTY MEDICAL SOCIETY.

Life Insurance and its Relations to the Medical Profession.

Resolutions Declaring the Rate of Compensation for Examining Applicants for Insurance.

At a meeting of the Wayne County Medical Society, held in Detroit, on Wednesday, January 6th, 1869, the following Report of a committee appointed to fix a rate of compensation for examining applicants for life insurance was adopted:—

Mr. President and Gentlemen of the Wayne County Medical Society:

Your Committee, to whom was referred for report the question, "What should constitute the proper medical charges for examination of applicants for life insurance, and what should constitute the proper fee for attestation as medical attendant?" respectfully submit the following:—

The tables of longevity of man are based on the initial of health; and from this standpoint all calculations must arise. To obtain this initial of health the life insurance companies have always, and must necessarily, rely upon the opinions of the medical profession, who are the only authority. In other words, the medical profession are the guardians of the whole science of successful life insurance.

Occupying, therefore, as they do, this prominent position, it should follow that, in the emoluments arising therefrom, the examining physician should be properly and liberally remunerated for his services. Is he so?

Life assurance companies are now paying for examinations, which inform them of the standard of health of the person they propose to insure, the sum of from two to three dollars. No difference is made whether the risk be for one hundred dollars or twenty thousand. The agent may make his three to five hundred dollars on the amount insured. The officers have high salaries, and the stockholders large and frequent dividends, but the miserable pittance paid the physician is considered a large fee. The profession have themselves to blame only for this state of affairs; and to remedy this is the object of this Report. A united effort is only necessary.

Your Committee are of the opinion that now is the time, not only for the medical profession of the city, but for the profession of the whole State (and we might say the whole United States), to demand that remuneration which would be an equivalent for the service rendered.

What sum should, then, constitute a proper remunerative fee? Upon a careful examination of the whole question of fees, a sum of not less than *four dollars* should be charged for each and every primary examination.

Were the life insurance companies of this city all to combine, and employ only one examiner, at a fee of three dollars for each examination, his income would even then be less than that of any physician of moderate practice, and not entirely satisfactory for an annual professional income, considering the value of the talent employed.

In certifying to the health of the applicant for life insurance by his usual medical attendant without fee, except as obtained from the applicant, a great hardship has been thrown on the profession, without the least consideration of the relation of medical adviser and patient. We are, with surprising coolness, asked to betray that which has been confidentially placed in our charge, and so deprive our patrons of the advantages of life assurance, or to falsify our statements to the interrogatories put, in order that he may be insured; and, even then, are told the company does not pay, but the applicant should. He does it with pleasure, if insured, but is indignant at the charges if re-

jected by his physician's statement; and, of course, refuses the bill.

How, then, are the profession to remedy and protect themselves against this imposition?

1st. By refusing to give any such certificate unless with the verbal or written assent of the person to be insured.

2d. By refusing such certificate until the payment of a fee of not less than *three dollars*, if it can be given in the office of the attending physician; and, if a visit to the residence of the applicant be necessary, then a further fee of *two dollars* be added, and the whole to be paid by the assurance company.

In making these demands, the medical profession require nothing but what is just, and what every insurance company can easily and readily pay. They ask nothing more than a united effort will necessarily receive, and speedily accomplish. We therefore recommend the adoption of the following resolutions:—

Resolved, That the fee for examination for life insurance companies shall be the sum of *four dollars* for each and every primary examination.

Resolved, That we will not give a certificate as "family physician" without the verbal or written assent of the person to be insured, and, even then, reserving the right to withhold the same, if for the interest of the family of the applicant.

Resolved, That the fee for such certificate shall not be less than *three dollars*, if the blanks can be filled in the physician's office; and, if further labor be entailed, a further fee of *two dollars* be added, the whole to be paid by the insurance company; and

Whereas, A united action of the profession is necessary to perfect the above recommendation, and carry the resolutions into proper effect; therefore,

Resolved, That the Wayne County Medical Society respectfully and earnestly ask of the profession, not members of the Society, in the City of Detroit, to cordially unite for the common good in our effort for remunerative fees for examinations and certificates in life insurance; as, we believe, the charges demanded are equable and just.

Resolved, That the physicians of the State be requested to take like action in this matter; and that, to further the same, your Committee be empowered to present this Report and Resolutions to the State Medical Society, at its next meeting, in June.

Resolved, That the time for the taking of effect of the resolutions regulating the rate of fees be the first day of February, 1869; and, until that time, no member of this Society will be expected to contract for any length of time with any company at a less rate than the tariff fee.

Resolved, That the Secretary send a copy of this Report and Resolutions to every medical journal in the United States, to the public newspapers of this city, and a copy of the Resolutions, fixing the tariff of fees and time of taking effect, to each life insurance agent in the city, and the home offices, and that the Treasurer be authorized to pay all expenses attendant thereon.

WILLLIAM BRODIE,
J. F. NOYES,
H. F. LYSTER,
} *Committee.*

Attested by: H. O. WALKER, *Secretary.*
CARL BRUMME, *Vice-President.*

The Clinique.

FROM THE SERVICE OF PROF. N. S. DAVIS, IN THE MEDICAL WARDS OF MERCY HOSPITAL, FEBRUARY 18, 1869.

REPORTED BY W. A. BARSTOW.

GENTLEMEN:—This man tells us that, some six months ago, while engaged in sinking a shaft in the vicinity of Morris, in this State, he was attacked with pain in the anterior portion of the thigh, stopping short above the knee. The pain, however, soon extended to the iliac and lumbar regions, and subsequently

across to the epigastrium, which has continued since the last of July, with but little relief. He has been under treatment for rheumatism. I first saw him at my office one or two weeks since. I find, on examining the spine at the lower, or next to the lower, lumbar vertebra, there is a little prominence. There is but little tenderness over the spinous processes, but directly along the right side of the vertebra, for several inches, it is extremely sensitive, and seems to be almost exclusively limited to the right side. There seems to be a very little swelling, but which may be due to dry cups which were applied two days since. He will allow any degree of flexion of his thigh, but if you extend the leg and carry it back of its fellow, the pain is reflected along the margin of crest of the ilium and abdomen. If he sits down, or stoops to pick up anything, instead of bending forward as a well person would, he squats down, endeavoring to keep his spine as straight as possible.

This symptom is of great value in forming a diagnosis, and raises the question as to what the disease is, and what has produced it? To the experienced observer, his symptoms immediately suggest one of the three following diseases:—1. Inflammation of the psoas muscle, or adjacent areolar tissue, tending to the formation of an abscess. 2. Disease of the vertebra. 3. Inflammation of the right half of the spinal cord. Any one of these three diseases would be brought to mind in the investigation. First, we will take up affections involving the psoas muscle. Pain in the front part of the thigh and abdomen would first lead us to suspect that this muscle was involved. The first effect of inflammation in contact with a muscle is to render it rigid. The tendency, if the psoas muscle is inflamed, is to relax the abdomen by flexing the thigh on the pelvis. If he puts his leg down straight, or stands square on his feet, he will lean his body forward, so as to still relax the muscle on the anterior part of the spine; and, if in bed, he will be found to have the thigh drawn up. The pain accompanying psoas abscess is dull and deep-seated, extending from the abdomen to the junction of the lumbar vertebra, and across by the crest of the ilium. The most diagnostic signs being, pain down the

thigh, and in one side of the abdomen, and the flexion of the thigh. If asked to flex the thigh strongly, he cannot, the pain being much increased. If you examine the patient while on his back, you will generally find, on pressure, a degree of tumefaction along the inside of the anterior part of the crest of the ilium, or a sense of fulness and tenderness, which does not correspond to the opposite side. In the present case, none of these symptoms are present, except the pain in the anterior part of the thigh, and pain in extending the leg backward. Is the disease in the vertebra? One symptom exactly corresponds with the early stage of spinal disease, *viz.:*—the mode of stooping down, which may be noticed in children who have spinal disease, coming on even before they complain much. Instead of stooping over, they will likewise squat; and if they can reach anything to support them in rising, they will do so. This symptom, however, is not restricted to disease of the bones of the spine, but may be present in any affection that renders the spine sore.

Six months have elapsed, and there is no perceptible alteration, except in the one spinous process previously mentioned; hence, we are not justified in saying that he has disease of the vertebra from the manner of stooping alone.

The tenderness along the sides of the vertebræ is severe, while in disease of the bone there is rarely any muscular soreness or neuralgic pains, until the disease has progressed to such an extent as to make some degree of deformity perceptible; then you have severe paroxysms of pain in the epigastric region, in the intercostal spaces, or horizontally around the abdomen. There is seldom any evidence, in the early stage, of interference with muscular action. But in this case, pain in the muscles was one of the first symptoms; and, taking this together with the facts that it is of six months' duration, and no deformity; while the pain follows certain nerves, with acute and severe tenderness along right side of the spine; increased by exercise, and occasional cramps in the abdominal muscles; all of which point to the right half of the spinal cord, corresponding with the lower half of the dorsal vertebra, as the seat of disease.

Both sets of nerves are involved—namely, those of sensation and motion. From a close investigation of his case, my opinion is, that he has chronic inflammation of the membranes of the spinal cord, along the lower third of the dorsal vertebræ. If that is the case, has it produced any disorganization of structure? We answer no, or it would have left him with paralysis; and, if there was effusion, this would have certainly produced paralysis in some degree. If it be simple chronic inflammation, involving the roots of nerves, what is the appropriate treatment? We answer, dry cupping, followed by belladonna plasters or hypodermic injections of atropine; and, internally, we will first put him on the following treatment:—

℞. Tinct. Cimmicifuga, ---------- ℥ij.
Tinct. Stramonii, ---------- ℥ss.
Iodide Potassa, ---------- ℥iiss.
Simple Syrup, ---------- ℥iss.
Mix.

Of which, we will give a teaspoonful every four hours; and, three times a day, a powder, consisting of—

℞. Potassa Nitras, } āā, ---------- gr. viij.
Pulv. Doveri, }
Hyd. Chlor. Mite, ---------- gr. ij.

The calomel to be discontinued as soon as its alterative effects are perceptible in the breath or gums.

These means, with rest in the horizontal position, will be likely to remove the disease in from four to six months.

Common tumblers form good cups for broad surfaces like the back, as was shown by their application in this case before the Class.

Gentlemen:—The next case to which I propose to call your attention to-day is one of partial hemiplegia.

The patient is a carpenter, and says that, for two or three months before the attack, he was at times light-headed and dizzy, and was afraid to venture upon the scaffolding, and consequently went to work in the shop.

It seems that, the night of the attack, the patient was out later than usual with some friends, and during the evening had

indulged in a glass or two of stimulants, but not enough to feel the effects to such an extent that he did not know all that occurred.

After parting with his friends, he started for home. Before he proceeded far, however, he says that he was gradually taken blind and dizzy, and finally fell on the sidewalk, and became partially unconscious. When he recovered himself, he found he had no power in his right arm nor leg, but succeeded in dragging himself to a doorway.

Until within the past week, he has been under treatment at Madison, Wis., where he was living at the time of the attack. At present, you would hardly know that his leg was affected in walking; but, on closer observation, you would notice that he raised it with difficulty when attempting to step over anything. His face has improved equally with his leg, but his arm is still nearly useless. Can shut his hand quite tight, and has a good degree of power in the flexor muscles; but the action of the extensors is much impaired, and supination is also rendered imperfect. This shows us that the whole set of extensors, from he shoulder down, are more feeble than the flexors.

The first item we wish to investigate is the seat of the disease. The paralysis of the arm and leg are but symptoms, and may arise from three sources:—1. The muscles themselves, as in lead palsy. 2. The spinal cord. 3. The brain itself. The symptoms of giddiness and the paralysis, extending to the face, must necessarily involve the nerves within the cranium: hence, we refer it to the brain. If there had been no paralysis of the face and tongue, we might have presumed it was in the spinal canal. The patient's mind being clear, while there is giddiness and dimness of vision at times, we refer the seat of disease to the base and central portions of the brain.

In determining the nature of a disease like this, it is essential to get as accurate a history of the case as possible.

First, we may have paralysis come on suddenly, with severe pain, as in the case of the patient up-stairs, to which your attention was a few days since directed, indicating a pathological change of an apoplectic character.

In this case, it has come on gradually, and became fully developed when under the effects of stimulants. Rest improves his muscular power, while exercise uniformly exhausts it.

This would indicate the existence of some gradual change at the base of the brain, like syphilitic thickening of the dura mater, the growth of a tumor, or gradual softening of brain substance.

We will endeavor to draw the line of distinction between these pathological conditions.

The symptoms of white atrophy or softening do not correspond to those of the case before us. That disease comes on insidiously, by simple impairment of the muscular power, the legs or arms requiring an extra exertion on the part of the patient to use them. It is a gradual weakening, which, when once begun, continues on worse and worse, and involves loss of coördinating power and strength, without complete paralysis, until the last stage of disease.

Now this man was not progressively losing the strength and coördinate power of his muscles, but merely giddiness and headache. And, instead of steady increase of his disease, under treatment he has been decidedly improving, and now only complains of paralysis of the right arm, with pain in the shoulder of the affected side, and occasional darting of pain up the back part of the head.

It seems that, several years ago, this patient contracted syphilis; and he now has maculæ on the skin, and what he calls catarrhal disease in the nostrils. And it is highly probable that his giddiness and paralysis arise from thickening of the dura mater over the sphenoid bone.

It is of the utmost importance to ascertain the cause, in such cases as this, in order to know how to treat the disease intelligibly. He has been taking iodide of potassium and strychnia; and I think, had the iodide been combined with minute doses of the bichloride of mercury, it would have benefited him still more. The question is, had the disease involved the bones—either the ethmoid and palate, or any portion of the sphenoid? If it has, the prognosis would be considered unfavorable, al-

though not terminating for three or four years. If it is confined to the soft parts, we would expect a recovery.

Viewing the case in this light, we will put him on the following treatment, with an occasional intermission of a week:—

℞. Iodide Potassium, ---------- ℥iij.
Bichlor. Hydr., ---------- gr. j.
Syr. and Aquæ, ---------- ℥iv.
M.

Of which, we will give a teaspoonful four times a day. We will also use a weak solution of carbolic acid as an injection, which may be applied by means of a curved syringe through the posterior nares. We may derive some benefit from muscular tonics when the muscles are flaccid; but strychnia and electricity should never be used to any extent, if there is rigidity of the muscular fibres.

Under the foregoing treatment, we may expect the patient to recover a good degree of health, and the use of his arm, in from four to six weeks. It will depend, however, upon whether the bones at the base of the brain are affected or not.

Selections.

THE PATHOLOGY AND TREATMENT OF SUNSTROKE.

By GEORGE JOHNSON, M.D., F.R.C.P., Professor of Medicine in King's College; Physician to King's College Hospital.

The formidable disease known by the name of *sunstroke*, or *heat-apoplexy*, might (Dr. Johnson writes) be more correctly designated *heat-apnœa*. Although this affection frequently occurs from direct exposure to the sun's rays, it is also of common occurrence without such exposure. The one essential and constant condition is a very high temperature of the air. The most powerful concurring causes are—muscular exertion and excessive fatigue; hot clothing, and especially such as tends to impede the respiratory movements; an excessive use of alcoholic liquors; and the close and impure air of hot and over-

crowded rooms. The disease may be fatal in a few minutes, or the symptoms may last from one to forty-eight hours.

The rapidly fatal cases are spoken of as belonging to the *cardiac* variety. The patient falls unconscious, gasps, and dies. When the disease runs a less rapid course, it is said to be of the *cerebro-spinal* variety. There are great heat, dryness, and redness of the skin, giddiness, nausea, congestion of the eyes, and frequent desire to micturate; sometimes delirium, then drowsiness, passing into coma. The pupils are contracted; the breathing is hurried and laborious; the heart's action is tumultuous; the pulse rapid, at first distinct, but soon becoming feeble and irregular. Convulsions are of common occurrence, either early in the attack, or immediately before death. After death, however rapid may have been the course of the disease, the one constant condition is extreme, "unexampled" congestion of the lungs, with distention of the right side of the heart.

Dr. Maclean, to whose article on sunstroke (Reynold's *System of Medicine*) Dr. Johnson would refer for a clear and succinct account of the facts of the disease, states that all modern pathologists are agreed that the superheating of the blood, which precedes and accompanies sunstroke, has a depressing, and not a stimulating, effect on the nervous centres. In what way, then, does the overheated blood exert this depressing effect on the nervous centres? Dr. Johnson believes the following to be the true physiological explanation of the phenomena:—

The hot blood relaxes the muscular walls of the minute pulmonary arteries. The pulmonary capillaries are consequently flooded with blood. This overfulness of the capillaries interferes with the aëration of the blood. In fact, the overgorged vessels must encroach upon the pulmonary vesicles, and so diminish the air-space within the lungs; while the air itself is highly rarefied. Hence a state of more or less complete apnœa. Unaërated blood is sent to the muscular tissue of the heart, and to the brain: hence the cardiac and the cerebral symptoms. A similarly engorged state of the cutaneous capillaries, consequent upon extreme relaxation of the minute arteries, is the probable cause of the dryness of the skin. An excessively engorged state of the capillaries is as unfavorable for cutaneous secretion as it is for pulmonary respiration. The dry and inactive state of the skin and the want of surface-evaporation tend to elevate still more the temperature of the blood; and the suppressed cutaneous secretion, being diverted to the kid-

neys, probably alters the quality of the urine, renders it irritating to the bladder, and explains the frequent micturition.

This explanation of the phenomena is confirmed by the results of treatment. There is now a very general concurrence of opinion that the application of cold to the skin is the most successful remedy. The object to be kept in view is not merely, as it is generally stated, to cool the skin, or to excite the respiratory movements by the stimulus of the douche, but to cool the blood, and thus to restore the contractility of the minute arteries of the lungs. The condition of the pulmonary vessels in this disease is the exact opposite to their state in cholera collapse. In cholera collapse, the minute pulmonary arteries are in a state of extreme contraction; and, as a consequence, the capillaries are extremely anæmic. In heat-apnœa, pulmonary arteries are extremely relaxed; and the capillaries, consequently, are excessively engorged. In cholera collapse, external warmth in some degree, but much more rapidly and decidedly a warm injection into the veins, relaxes the arterial spasm, and restores the circulation. In heat-apnœa, on the contrary, the object is to cool down the overheated blood, so to revive the contractile power of the minute pulmonary arteries, to relieve the capillaries from their embarrassing excess of blood, and thus to remove the state of apnœa. A clear apprehension of these physiological principles cannot fail to be of great assistance in practice.

In the treatment of heat-apnœa, the following appear to be the main points which require attention:—The patient should be placed in a recumbent position in the coolest possible place, with a free current of air. The clothes should be removed, and cold water applied to the whole surface; or, if the symptoms be urgent, the clothes should immediately be saturated with cold water, without waiting to remove them. If the respiratory movements be failing and feeble, the cold douche is a powerful excitor; but if the breathing be rapid and laborious, it is better to envelop the body in a wet sheet, and to quicken evaporation and cooling by a fan or pair of bellows. If the patient can swallow, let him drink iced water freely. Whether he can swallow or not, iced water may from time to time be injected. The marvellous effect of hot venous injections in cholera collapse, and the urgent need for cooling the blood in heat-apnœa, suggest the expediency, in extreme cases, of injecting into the vein the same saline solution as has so frequently been employed in cholera, only injecting it cold instead of hot.

A routine practice of venesection would be destructive; but

when symptoms of excessive venous engorgement are present, a cautious venesection would be quite justifiable, and probably beneficial, on the well-known principle of lessening distention of the right side of the heart, and thus increasing its contractile power. When respiration has suddenly and quite recently ceased, artificial respiration by Dr. Silvester's method may possibly restore animation. While symptoms of apnœa continue, however great may be the apparent exhaustion, no alcoholic stimulants are to be given, for the reason that alcohol, as well as anæsthetic vapors and narcotics, impede oxidation of the nervous and other tissues, and therefore increase the risk of death from apnœa. Ammonia may be applied to the nostrils as a stimulant, and, if the patient can swallow, it may be given internally. Ammonia is a powerful diaphorectic, and the restoration of the cutaneous secretion is an important step towards recovery. When the skin becomes cool and moist, of course all cold applications are to be discontinued. To sum up, then—as *hot air* and *hot blood* are the cause of this form of apnœa, so *cold air* and *cold water* are the chief means of cure; all other means are subsidiary to these.—*British Medical Journal, August 1.—Ranking's Abstract.*

ON EXCESSIVE SWEATING.

By ARTHUR WYNNE FOOT, M.D., F.K., & Q.C.P.

Among the more remarkable instances of general and excessive, that is, visible sweating, are the colliquative perspirations attending the venereal, cancerous, or phthisical cases, the drenching sweats of over-lactation, of the terminal stage of the normal ague paroxysm, the sweatings or crisis of rheumatic fever, and those occurring about the time the ovaries become effete. The exhausting effects of those obviously unnatural cutaneous discharges have, as is just and right, caused more anxious search to be made for any means of moderating or controlling them, than of explaining their etiology. It appears as if the causes of general profuse sweating might be referable to two causes (perhaps to but really one): to the circulation of a poisonous blood, and to depression of the vital powers; that is, to diminished energy of the sympathetic system. The condition of the temperature, pulse, and skin at the termination of an ague paroxysm points to a paralyzed and dilated condition of the arteries; the hepatic, splenic, or thyroidal enlargements may

result from excessive flow of blood to these parts from the same cause. The earlier stage of poisoning by malaria appears very different from the latter one, the cold, wrinkled, shivering surface contrasting with the hot, flushed, sweating one; but in other poisons of vegetable origin, as in opium, the earlier effects are stimulant and very different from the later ones, and the phenomena observed in the first stage correspond to those which attend experimental stimulation of the sympathetic nerve. Cruveilhier remarks, that of the three stages of a paroxysm of intermittent fever, that of sweating is the most constant. Some attacks may be without the cold stage, others without the hot stage; but it is very rarely that the sweating stage is absent; he has recognized an irregular ague by the nightly occurrence of profuse sweating amenable to quinine. There is reason to believe that the perspirations of rheumatic fever, although they may seriously compromise the comfort of the patient, and he may be sensible of but little relief from pain by them, yet serve to remove from the body much of the *materies morbi* which is the exciting cause of the symptoms. In phthisis, profuse perspiration, although generally a symptom of very advanced disease, may be present at a period when both auscultation and percussion give only dubious information as to the condition of the lung, and in such case it will be found generally to be disseminated tubercle from which the individual is suffering. Cruveilhier records a remarkable case of this kind, which, as far as physical diagnosis was concerned, remained undetermined up to the person's death, but which was marked from the very first by excessive night-sweats, accompanied with rapid emaciation and profound debility. Regarding the colliquative sweating of phthisis as a consequence of vaso-motor paralysis resulting from constitutional exhaustion, it is not difficult to appreciate the value, although often but temporary, of nutritious diet, and such medicines as cod-liver oil. In support of the view that phthisical sweatings are the natural result of the depressed condition of the vascular system of the patient, are the observations that these perspirations usually come on when the person falls asleep, and more frequently during night sleep than day sleep; it has also been shown by Dr. Edward Smith, that in cases of phthisis, the subsidence of the rate of pulsation during the night is much greater than in health, and that the greater difference between the day and night rate in phthisis than in health is less due to the increased elevation of the pulse during the day than to the great subsidence of it through the night. The usual time for the occurrence of perspiration in

typhoid fever is in the night, the skin in the daytime being usually dry; and according to Traube's researches, the critical evacuations in typhus fever, and among them perspiration, are always preceded by a considerable fall in the pulse. In many other cases depression of the heart's action is a well-known cause of perspiration—for example, those attending the syncopal state which the inexperienced smoker falls into, the sweating which attends sea-sickness, extreme purgation, the exhibition of tartarized antimony, and the effects of terror. The remedies which prove serviceable in the majority of cases of excessive general sweating are such as tend to remove depression of the heart's action, and act as tonics on the vaso-motor nerves. The difference in gravity of import between local and general sweatings appears to be very great, because, although a partial sweating may excite more alarm and closer attention from the greater rarity of its occurrence, yet it does not appear that it is in most cases indicative of by any means as serious nervous disturbance as are the general sweatings.

For the relief of sweatings of the hands, Dr. Druitt has suggested the thorough application of the hottest water that can be borne without pain to the offending parts until they are red hot, and tingling as if scalded. This treatment, the author states, sometimes appears to aggravate the affection. Hebra recommends the frequent local use of a solution containing one drachm of tannic acid mixed in six ounces of alcohol; this liquid should be rubbed into the part several times a day, and the skin must not be wiped afterwards: a little powdered asbestos is to be sprinkled on it while still wet, and with this the part is to be rubbed till it is dry. From statistics, he finds that this complaint affects the young as well as the old, both males and females, rich and poor, those who are of cleanly habits and those who are dirty, persons who are in good health and those who suffer from other maladies.—*Dublin Quarterly Journal of Medical Science, May.—Ranking's Abstract.*

PHOSPHORUS IN LOCOMOTOR ATAXIA.

By WALTER LAMBERT, M.B., Amherstburg, Ontario, Canada.

Miss F. B., aged 22, had been suffering slightly with anæmia and scanty menstruation for about one year. At different times, she took ferruginous preparations, with decidedly good effects; but, as soon as relieved, she would leave off taking the

medicine, and her trouble would return. She also had ague once or twice during the summer, it being very prevalent at that time in the neighborhood. For it she was specifically treated, and from it she soon recovered.

For the chlorosis I sometimes gave mistura ferri comp. (Griffith's), sometimes tinct. ferri and quiniæ disulph.; lastly, I was giving her syr. ferri iodidi, with cod-liver oil. In September last, from exposure to wet and cold, her menses ceased, and all the symptoms of progressive locomotor ataxia set in. Her parents, who live in the country, came for more medicine, and casually told me that their daughter walked with great difficulty, and that her menses did not come on at their usual period; consequently, I went to see her, and, in her attempting to shake hands with me, she grasped me by the wrist. This excited my fears immediately that she had Duchenne's disease. Upon further examination, my diagnosis was verified. The patient, in attempting to walk, staggered and swayed her body from side to side to keep her equilibrium. She would suddenly halt to recover herself, and then would plunge forward, seemingly in a great hurry to reach the point to which she desired to go. She was unable to feed herself, from the want of coördinate action of the muscles; and, in fact, unless she was watching her hands continually, she was liable to drop whatever she had in them. Her speech was also affected; she was not able to articulate some words perfectly.

What is passing strange in this case is, that I was giving her syr. ferri iodidi at the very time that the disease manifested itself; the very medicine that Dr. Julius Althaus used with so much benefit in his case, the only one recorded, until lately, that had been much benefited by medicine.

As soon as I recognized the disease, I gave potass. bromid. grs. xv., ter in die, and submitted the patient to the action of magneto-electricity once every twenty-four hours. I also gave two pills of aloes and iron, which produced too much relaxation, the effect continuing two or three days. This, in fact, seemed to prostrate her to such an extent that she was obliged to take to her bed, and there remain for a time. Fortunately, just then I received the September number of the *New York Medical Journal*, and in it saw that Dr. Dujardin Baumetz had given phosphorus in this disease, with excellent effects. I immediately ordered acidi phosphorici dilut. m. xv., ter in die, in simple syrup. The next day her menses came on, and in a short time she began to improve. In a few days I increased the dose to twenty, twenty-five, and then to thirty minims.

After ten or twelve days, I omitted the acid, and gave her the pyro-phosphate of iron for a week, and then returned to the acid. I continued the electricity every alternate day. In two weeks she was able to sit up, and had sufficient control over the muscles of her upper extremities to be able to knit. In one month she could walk about the house tolerably well. Now it is something over two months; she can take long walks, do housework as well as ever, and has become very fleshy. The electricity has been discontinued for about one month, and she is not at all regular with her medicine at the present time. However, I have the most sanguine hopes that she will perfectly recover. The improvement has been so great that it is impossible to discern anything wrong with her, except a very slight irregularity in her walk.*—*New York Medical Journal.*

ON THE ACTION OF BLOODLETTIING, HEAT, COLD, AND IRRITANTS, IN THE TREATMENT OF DISEASE.

By GEORGE JOHNSON, M.D., F.R.C.P., Physician to King's College Hospital; Professor of Medicine in King's College, etc.

The general principles which Dr. Johnson has, in this paper, endeavored to establish, are:—

1. That the object of bloodletting is to lessen hyperæmia of certain parts of the vascular system.

2. Venesection is adapted for lessening engorgements of the venous system, which is usually a result of an impeded circulation through the lungs and left heart. When there are manifest signs of engorgement of the veins and obstruction in the lungs, a feeble arterial pulse does not contraindicate venesection; and there is no inconsistency in combining the practice of venesection with the administration of stimulants.

3. Local bleeding, by leeches or by cupping, is useful in many cases of inflammation. The bleeding acts by diverting blood through the superficial arteries from the deeper arteries which supply the inflamed parts.

4. Warm baths, fomentations, poultices, and dry cupping, act in an analogous way to local bleeding, but without actually removing the blood from the system.

* We are informed by Dr. Lambert, in a note received since this article was in type, that the patient has perfectly recovered under this treatment.—E. S. D.

5. Cold contracts the vessels to which it is immediately applied. The result of this may be a sympathetic contraction of distant and deeper vessels, or a driving in of blood to deeper parts. Cold to the surface, therefore, is an uncertain remedy in cases of internal inflammation.

6. The application of strong irritants, so as to inflame the skin, in the early stage of acute internal inflammations, is a distressing, and often a mischievous, practice.

As a general rule, in cases of inflammation, those local remedies are the most efficacious which are the most painless, and which quicken in the greatest degree the cutaneous circulation. —*British Medical Journal, Nov. 7.—Ranking's Abstracts.*

Book Notices.

Treatise on the Diseases of the Ear, including the Anatomy of the Organ. By Anton Von Troltsch, M.D., Professor in the University of Wursburg, Bavaria. Translated and edited by D. B. St. John Roosa, M.A., M.D., Clinical Professor of the Diseases of the Eye and Ear in the University of New York, New York; Surgeon to the Brooklyn Eye and Ear Hospital, etc., etc. Second American, from the fourth German Edition. Pp. 565. Price, $4.50. New York: William Wood & Co. 1869.

This is a thoroughly revised and much enlarged edition of an excellent work. The translator has done his work well, and has added many valuable items to the text. There are no diseases concerning which the general mass of practitioners need some additional training, more than those of the ear. They will find in this volume much valuable assistance; and we commend it to their attention.

A Treatise on the Diseases of Infancy and Childhood. By J. Lewis Smith, M.D., Curator to the Nursery and Child's Hospital, New York; Physician to the Infants' Hospital, Ward's Island; Professor in Bellevue Hospital Medical College, New York. Philadelphia: Henry C. Lea. 1869.

This is a volume of 620 pages, substantially bound in leather, and printed on fair type and paper. The author has had abundant opportunities for observation and clinical experience, and has embodied the results faithfully in the work before us. We have not had time to examine critically any part of it; but, from a hasty glance at some of the Chapters, we are satisfied that it will form a very valuable addition to the library of every practitioner.

For sale by W. B. Keen & Cooke, 113, 115 State Street, Chicago.

Syphilis and Local Contagious Disorders. By BERKELY HILL, M.B., Lond., F.R.C.S., Assistant Surgeon to University College Hospital; Teacher of the Use of Surgical Apparatus in University College, and Surgeon to Out-Patients at the Lock Hospital. Philadelphia: Henry C. Lea. 1869.

This is a small-sized octavo volume of 487 pages, containing an excellent summary of the present knowledge in relation to the nature and treatment of true syphilis and its associate diseases of a more or less contagious character. For the busy practitioner and the student, it will be quite as useful as many of the more voluminous and expensive works.

For sale by W. B. Keen & Cooke, 113 State Street, Chicago.

Pennsylvania Hospital Reports. Vol. II. 1869. Philadelphia: Lindsay & Blakiston.

This is an octavo volume of 320 pages, published in excellent style, and filled with matter of direct practical value. It contains twenty-three articles, prepared by Drs. Addinell Hewson, Thomas George Morton, J. M. Da Costa, James N. Hutchinson, Edward Hartshorne, John Ashhurst, William Hunt, J. Forsyth Meigs, John N. Packard, D. Keyes Agnes, George C. Harlon, James Tyson, Joseph G. Richardson, Elliot Richardson, and William Pepper. The materials were furnished mainly by the practice of the hospital, and embrace both medical and surgical topics of permanent interest and value. Price, $5.00.

For sale by Keen & Cooke, 113 State Street, Chicago.

Compendium of Auscultation and Percussion, and of the Physical Diagnosis of Diseases affecting the Lungs and Heart. By Austin Flint, M.D. Fourth Edition. New York: William Wood & Co. 1869. Pp. 36. Price, $0.50.

A History of the Medical Department of the University of Pennsylvania, from its Foundation in 1765, with Sketches of the Lives of deceased Professors. By Joseph Carson, M.D., Professor of Materia Medica and Pharmacy in the University of Pennsylvania, Member of the American Philosophical Society, etc. Philadelphia: Lindsay & Blakiston. 1869.

This is a good-sized octavo volume of 227 pages, well bound in cloth. The title gives an exact idea of the contents of the volume; and the well-known ability of Dr. Carson is sufficient evidence that both the historical account of the University and the biographical sketches are written with fidelity and elegance. Price, $3.00.

Quarterly Summary of the Transactions of the College of Physicians of Philadelphia; from December, 1866, to December, 1868, inclusive. Philadelphia: Collins, Printer, 705 Jayne Street. 1869.

Twenty-four pages of this fasciculus of the Transactions of the College of Physicians of Philadelphia, are occupied with abstracts of papers read, and discussions had, before the Society on matters of practical interest; and the remaining twenty-four with interesting biographical sketches of the late Drs. T. E. Beesly, C. W. Pennock, and Francis West.

The Part Taken by Nature and Time in the Cure of Diseases. A Dissertation, for which a Prize was awarded to James F. Hibbard, M.D., by the Massachusetts Medical Society, 1868.

This is a monograph, or, more properly, an essay, of 46 printed pages, in paper cover.

It is written in good style, and we congratulate the author on his success in competing for an honorable award. On the

subject discussed in the essay we shall have more to say hereafter.

On the Microscope in the Diagnosis and Treatment of Sterility. By J. Marion Sims, M.D. Reprinted from the *New York Medical Journal*, for January, 1869.

This is a pamphlet of 25 pages, on a subject hitherto obscure and difficult of investigation.

In it, Dr. Sims gives a very interesting account of the manner in which the microscope may enable us to arrive at far more certain conclusions concerning the causes of sterility, than is possible to do without its use. He is entitled to the thanks of the profession for this valuable addition to our methods of investigating and treating human ailments.

Operation of Vesico-Vaginal Fistula, without the Aid of Assistants; with a View of the relative Merits of the Clamp, interrupted Silver, and Button Sutures. By Nathan Bozeman, M.D., of New York. Reprinted from the *New York Medical Journal*, for February, 1869.

This is a pamphlet of 26 pages, illustrated with cuts, and containing matter of much interest and value in relation to the treatment of vesico-vaginal fistule.

Archives de Physiologie, Normale et Pathologique. Published by M. M. Brown-Séquard, Charcot, Vulpian. No. 2 for March and April, 1869. Illustrated with 4 plates and 17 figures, executed in excellent style. Printed by Victor Masson & Sons, 17 Place of the School of Medicine, Paris.

This number of the Archives fully sustains the reputation of this most valuable publication. We repeat a previous recommendation, that for all who can read the French language, this periodical is worth many times its cost.

Venesection as one of the Means for Arresting Unavoidable Hemorrhage. By C. C. F. Gay, M.D., Member of the Surgical Staff of the Buffalo General Hospital, Buffalo, N. Y.

This is a pamphlet of 8 pages, originally published in the *American Journal of Medical Sciences* for the year 1869. The author adduces some cases and excellent reasons to show that venesection may be resorted to in some cases of placenta prævia for the double purpose of arresting hemorrhage and hastening the dilitation of the neck and os uteri.

Practical Painter.—We have received No. 1 of Vol. 1, of a small sheet in newspaper form, with the above title, published monthly at 37 Park Row, New York City. Price fifty cents per annum. To painters we think it would be of interest and value.

Editorial.

State Medical Society.—Let all our readers remember that the next Annual Meeting of the Illinois State Medical Society is to be held in Chicago on the *third* Tuesday in May. All Societies are entitled to one delegate for every five members.

American Medical Association.—Arrangements have been completed by which all Delegates to the meeting in New Orleans on the first Tuesday in May next, can be returned *free* over either of the railroad routes from New Orleans to Chicago and intermediate places. One route goes by way of Louisville and Nashville, and will afford an opportunity to visit the Mammoth Cave in Kentucky; and the other is by way of Cairo, Columbus, etc.

The fare over both routes from Chicago to New Orleans is the same, $38.00, and must be paid in going, the Delegate being allowed to pass back over the same route free. These are very liberal arrangements on the part of the railroads, and should ensure a large delegation from the North-west.

Alumni Association of Chicago Medical College.—This Association held its second anniversary meeting in the College

on the evening of the 22d of March. It was numerously attended, and the full proceedings will be published in our next number.

Death of Dr. A. A. Dunn.—The undersigned committee, to whom was referred the duty of expressing the sentiments of this Society regarding the late A. A. Dunn, M.D., of this city, would respectfully report:—

That Dr. Dunn, by his natural intellectual endowments, his education, his professional skill and integrity, his ardent support of Medical Societies and ethics, had won the esteem and confidence of all the members of the profession who knew him; while the addition of a uniform Christian deportment, and a self-sacrificing patriotism, had added equally the respect and warm attachment of all classes of community.

That, by his death, the Profession and Society have lost one of their most respected and useful members, the nation one of its true *heroes* and defenders, and this Society one we all esteemed as a brother.

Resolved, That a copy of the foregoing expression of sentiment be communicated to the family of the deceased and to the medical journals and daily papers of this city.

N. S. Davis,
T. D. Fitch,
A. Groesbeck,
} *Committee.*

Death of Dr. John Charlton.—At a meeting of the Physicians of Freeport, held March 16, 1869, the following preamble and resolutions were unanimously adopted:—

Whereas, It has pleased Almighty God to remove from among us Dr. John Charlton, an old and honored member of our profession.

Resolved, That by the death of Dr. Charlton the profession has lost a member whose skill and experience entitled him to our regard and respect, whose uniform kindness and courtesy challenged our affection, and whose honesty and integrity as a Physician gave him a deservedly high rank in his profession.

Resolved, That in the death of Dr. CHURLTON, society has lost a useful citizen, and his family a kind and affectionate husband and father.

Resolved, That to the family of the deceased we tender our heartfelt sympathy.

F. W. HANCE,
W. J. MCKIM,
L. A. MEUSE,
} *Committee.*

COMMENCEMENT EXERCISES IN CHICAGO MEDICAL COLLEGE.

The Tenth Annual Commencement in the Chicago Medical College was held in the College Hall on Monday and Tuesday, March 22d and 23d, 1869. The exercises on Monday commenced at 3 o'clock, and occupied the remainder of the afternoon. They consisted in the reading of Inaugural Thesis by HENRY H. SLOAN, GEORGE K. DYAS, and WILLIAM E. QUINE; and a public examination of the candidates for graduation in class.

The exercises on Tuesday commenced at 3 o'clock P.M.; and we clip the following brief account from the daily *Chicago Times*:—

The commencement exercises of the tenth graduating class of the Chicago Medical College took place in the public hall of the College, No. 1015 State Street, at 3 o'clock on yesterday afternoon. The hall was densely filled with the friends of the institution.

The President, Dr. N. S. Davis, occupied the Chair.

Prayer was offered by the Rev. Charles E. Cheney.

All the undergraduates who were present, in accordance with the custom of the College, came forward and received their certificates for industry and scholarship. Dr. N. S. Davis addressed them a few words, remarking that they should remember that they had but just entered upon the wide domain of medical knowledge, and could only obtain the reward of final success by untiring industry and perseverance.

The Professor of Surgery, Dr. E. Andrews, next made a distribution of hospital certificates to all those entitled to receive them.

The President then awarded the prizes adjudged by a com-

mittee to the writer of the best and second best thesis on medical subjects. Thomas G. Williams, of Wisconsin, was decided to have written the best thesis; and he received the first premium—"Atkins on the Practice of Medicine." His subject was "The Physiological Action of the Bromides."

The second prize was awarded to Charles N. Cooper, of Illinois, for the second best thesis. His subject was the origin and Uses of Fibrin." He received a work on diseases of children.

The President then conferred the degrees upon the graduating class. Their names are as follows:—

Ordinary Degrees—Samuel Alexander, Daniel J. Allaben, Charles Ashworth, William A. Barstow, Geo. W. Barton, Carl Oscar Bendeke, Wallace Blanchard, Dwight E. Burlingame, William H. Carithers, William C. Chafee, Charles N. Cooper, William Deal, Simeon H. Drake, George K. Dyas, J. W. Folke, George H. Fuller, James S. Gibson, George W. Goodner, Chas. S. Hamilton, Green B. Hoblit, Theodore H. Johnson, Edward R. Kittoe, Joseph Kitchen, David T. Martyn, A. B. McCandless, D. Irwin McMillan, Joseph Milliron, Pacificus B. Porter, William E. Quine, Nelson Rinedollar, Isaac P. Sinclair, Henry H. Sloan, Joseph Sterrett, Daniel C. Stillians, Thomas G. Williams.

Ad Eundem Degrees—J. H. Curtis, Ernest Stachr.

Honorary Degrees—Jacob Holke, J. H. Newland, Meniard Risch, Shubael M. Reynolds.

The President addressed a few remarks to the class, urging them in all their future lives to remember they were acting in a field that concerns health and happiness; and that there were no persons who had opportunities for rendering so much happiness to their fellow men, as the faithful physician. They should remember that there were three things that were absolutely necessary to success: these were industry, integrity, and perseverence.

A very appropriate response on behalf of the class, was delivered by William H. Carithers.

Dr. J. S. Jewell next delivered the valedictory address. The world was divided into two great classes, the laborers of the mine, and the laborers of the mint. In all inductive sciences, there must be two epochs; first, the empirical, and secondly, the constructive and logical period. It is pre-eminently so in medical science. Many succeed in gathering facts, in observing phenomena; but they fail in constructive and logical power. Of the two provinces, the most lamentable failures are in the

latter domain. In the study of botany, geology, astronomy, and their kindred sciences, we must suspend for some time our deductions from the phenomena observed; but not so in the science of physiology. It requires, therefore, a power of quick, logical deduction to be a good physician; and this can only be attained by long and laborious reflection upon the facts already discovered. The process of logic to be relied upon is not that of the syllogism; but rather that of Bacon and Whewell, the logic of the inductive sciences. A knowledge of languages will not provide this; nor will a ready memory. The Professor proceeded to show what might be considered a true method of logic. The address was listened to with deep interest.

After the benediction, the assembly dispersed.

The programme was completed with a very pleasant social entertainment in the evening, at the residence of Prof. N. S. Davis.

East India Opium.—At Patna is one of the two great opium factories of India. It is the greater of the two, and may, therefore, be safely styled the largest poisoning agency in the world. The establishment faces the river Ganges, whose bed is here four miles across—at this season a desert of caked mud, with the river far away on the other side of the waste. The opium is shipped to Calcutta in a steamer, and it is a good instance of the fickleness of Indian rivers—those plagues of engineers—that last year, and for many years before, the sacred stream ran so close to Patna, that wharves were erected from which the chests could be put right on the steamers, and where the timber, wherewith to make the next year's chests, could be landed. This year the chests have to be carried a mile or so before being shipped.

This opium-packing for 1867 was just over at Christmas, and nearly 30,000 chests of China opium had been sent down to Calcutta, worth about £4, 000,000. Each chest contains 40 cakes —the dark, sticky stuff, ingeniously inclosed in a coating of dried poppy-leaves, so that each cake (weighing about two pounds) presents the appearance of a Dutch cheese or a cannon-ball.

It has given rise to the saying, that in war the British gave the Chinese cannon-balls of iron, and in peace cannon-balls of opium, thus giving them the choice of being shot or poisoned, and making them pay sharply for either attention. In return for this, they feed us with tea and clothe us in silk, which seems to show a truly celestial spirit.—*Sci. Amer.—Med. and Surg. Reporter.*

Mortality for the Month of February, 1869:—

CAUSES OF DEATH.

Accidents, burns	1	Exposure	3	Meningitis, and brain, dropsy of	2
" drowned	1	Erysipelas	4	" cerebro-spinal	3
" poisoned	1	Fever, congestive	1	Metritis	2
" R. R.	2	" puerperal	6	Old age	7
Albuminuria and dropsy	1	" scarlet	37	Paralysis	2
Anæmia	1	" " and diphtheria	4	" lungs, hemorrhage of	1
Apthæ	2	" " erysipelas	1	Peritonitis	1
Apoplexy	6	" " nephritis	1	Phthisis pulmonalis	33
" and intemperance	1	" " malignant	1	" " old age	1
Asthma	1	" typhoid	6	Pneumonia	31
Births, premature	14	" " heart disease	1	" and dropsy	1
" still	44	Gastritis	1	" whooping-cough	1
Bowels, cancer of	1	" and dropsy	1	Pneumonia broncho	3
Brain, congestion of	4	Glands, parotid, inflammation of	1	" pluero	1
" disease of	1	Heart, disease of	3	" typhoid	5
" inflammation of	2	" and kidneys, fatty degeneration of	1	Scrofula	2
" softening of	1	" valvular disease	1	Small-pox	1
Bronchitis	5	Hepatitis and apoplexy	1	Sub-maxillary glands, abscess of	1
" capillary	1	Hernia, scrotal, strangulated	1	Spine, irritation of	1
Cellular tissues, induration of	1	Hydrothorax	2	Stomach, cancer of	1
Cholera infantum	1	Hydrocephalus	2	Suicide by laudanum	1
Cordis, hypertrophy	1	" acute	1	" " shooting	1
Convulsions	32	Inanition	3	Talus mesenterica	5
" sore mouth	1	Injuries by fall	1	" universalis	1
Croup	4	Indigestion	1	Teething	1
" membranous	1	Icterus infantum	1	" convulsions	1
Cyanosis	1	Intemperance and exposure	1	Unknown,	4
Debility	1	Kidneys, Bright's disease of	3	Uterus, cancer of	3
Diarrhœa	3	" inflammation	1	Varioloid	1
" chronic	3	Liver, cancer of	1	Vertebare, caries of	1
Diphtheria	8	" disease of	1	Varicella and convulsions	1
" brain, congestion of	1	" inflammation of	1	Whooping-cough	8
" bronchitis	1	Lungs, congestion of	3	" convulsions	1
Dropsy	3	Measles	1	" pneumonia	1
Dyspepsia	1	Meningitis	4	Wounds of throat, self-inflicted	1
Dysentry	2			Total	333
" and brain, congestion of	1				
Encephalitis	1				
Enteritis	3				

AGES.

Under 1	85	20 to 30	30	70 to 80	12
1 to 3	63	30 to 40	34	80 to 90	3
3 to 5	30	40 to 50	20	Unknown	1
5 to 10	18	50 to 60	10		
10 to 20	6	60 to 70	21	Total,	333

COMPARISON.

Deaths in Feb., 1869,—333 | Deaths in Feb., 1868,—425 | Decrease,— 92
Deaths in Jan., 1869,—382 | Decrease, 49

Males, 164	Females, 169	Total, 333
Single, 231	Married 102	Total, 333
White, 327	Colored, 6	Total, 333

NATIVITIES.

Bohemia, 2	England, 10	Sweden, 5
Canada, 5	France, 1	Scotland, 4
Native Chicago, 56	Germany, 46	Unknown, 2
Foreign " 103	Ireland, 34	
U. S., other parts, 59	Norway, 6	Total, 333

MORTALITY BY WARDS FOR THE MONTH.

Ward.	Mortality.	Pop. in 1868.	One death in	Ward.	Mortality.	Pop. in 1868.	One death in
1	4	9,094	2,273½	14	20	14,839	742
2	17	13,074	769	15	22	21,078	958 1-10
3	19	15,076	793½	16	21	15,465	736 3-7
4	19	17,796	936⅝	County hosp.	7		
5	17	16,033	943⅜	Accidents,	5		
6	17	13,083	769 1-10	Mercy Hosp.	1		
7	33	25,492	772½	Suicides,	2		
8	20	15,813	790 4-7	Immigrants	3		
9	28	19,297	689⅙	Soldier's Ho.	1		
10	9	12,925	1,435 7-9	Prot. Orph. Asylum	1		
11	14	14,340	1,024 1-5	Home for the Friendless,	2		
12	29	17,485	603				
13	22	11,164	507½				

Total, 374

The decrease in the mortality of this month, compared with the corresponding month of 1868, is quite remarkable, indicating a good condition of health. This is most marked in the diminution of deaths by acute inflammatory diseases, particularly those of the lungs, infantile diseases, old age, and small-pox. In only two diseases has there been an increase, *viz.*, scarlet fever and erysipelas. This diminution in the mortality is owing to the remarkably mild and equable temperature of the month, and our comparative exemption from contagious diseases.

Money Receipts to March 17th.—Drs. A. D. Fitch, $6; F. Merriman, 9; Jacob Shnech, 3; D. Newcomb, 10; T. A. Lilly, 3; C. T. Hunter, 3; J. F. Young, 3; E. R. Atwood, 3; B. Lee, 3; F. R. Payne, 3; H. C. Lester, 3; D. Scott, 3; W. H. Buchtel, 3; Hiram Nance, 3; Brown & Kimber, 6; M. T. Didlake, 3; Thos. Bevan, 3; N. Lenn, 4 50; A. B. McCandless, 3; O. T. Maxon, 3; D. H. Patton, 6; L. M. Triplett, 3; A. G. Greenman, 3; Chas. Hill, 5; L. D. Smedley, 3; I. V. Golton, 3; S. P. Breed, 3; G. C. Paoli, 4; Wm. H. Cook, 3; L. D. Tompkins, 3; P. A. Shotwell, 3; D. B. Trimble, 3; Thos. Winston, 5; M. T. Didlake, 3; C. S. Ford, 5; Geo. F. Hunt, 3; H. S. Hall, 6 50; H. W. Boyd, 6; J. D. Mitchell, 5; Herbert Harris, 6; D. C. Stillions, 3; — Risch, 3; Thos. W. Howes, 3; John Bell, 3; Wm. Martin, 1; J. Priestman, 3; — Newland, 3; J. F. Williams, 9; Wm. Horne, 6; Saml. Alexander, 1 50; J. F. Kelsey, 3.

AMERICAN MEDICAL ASSOCIATION.

OFFICE OF PERMANENT SECRETARY:
WM. B. ATKINSON, M.D., S. W. cor. Broad and Pine Streets, Philadelphia.

The Twentieth Annual Session will be held in NEW ORLEANS, La., May 4th, 1869, at 11 A.M.

The following Committees are expected to report:—

On Diseases of the Cornea.—Dr. Jos. S. Hildreth, Illinois, Chairman.

On Cultivation of the Cinchona Tree.—Dr. Lemuel J. Deal, Pennsylvania, Chairman.

On Excision of Joints for Injuries.—Dr. J. B. Reid, Georgia, Chairman.

On Alcohol and its Relations to Medicine.—Dr. John Bell, Pennsylvania, Chairman.

On the Cryptogamic Origin of Disease, with special reference to recent microscopic investigations on that subject.—Dr. Edward Curtis, U. S. A., Chairman.

On Operations for Hare-lip.—Dr. A. Hammer, Missouri, Chairman.

On Clinical Thermometry in Diphtheria.—Dr. Jos. G. Richardson, New York, Chairman.

On Prophylactics in Zymotic Diseases.—Dr. Nelson L North, New York, Chairman.

On Inebriate Asylums.—Dr. C. H. Nichols, D. C., Chairman,

On the Influence of the Pneumogastric Nerve on Spasmodic and Rhythmical Movements of the Lungs.—Dr. Thomas Antisell, D. C., Chairman.

To Examine into the Present Plan of Organizatiou and Management of the United States Marine Hospitals.—Dr. D. W. Bliss, D. C., Chairman.

On the Utilization of Sewerage.—Dr. Stephen Smith, New York, Chairman.

On the Influence of Quarantine in Preventing the Introduction of Disease into the Ports of the United States.—Dr. Elisha Harris, N. Y., Chairman.

On Nurse Training Institutions.—Dr. Samuel D. Gross, Pennsylvania, Chairman.

On Commissioners to aid in Trials involving Scientific Testimony.—Dr. John Ordronaux, N. Y., Chairman.

On Annual Medical Register.—Dr. John H. Packard, Pennsylvannia, Chairman.

On Devising a Plan for the Relief of Widows and Orphans of Medical Men.—Dr. John H. Griscom, N. Y., Chairman.

On Veterinary Colleges.—Dr. Thomas Anticell, D. C., Chairman.

On Specialities in Medicine, and the Propriety of Specialists Advertising.—Dr. E. Lloyd Howard, Maryland, Chairman.

On Library of American Medical Works.—Dr. J. M. Toner, D. C., Chairman.

On Vaccination.—Dr. Henry A. Martin, Massachusetts, Chairman.

On the Decomposition of Urea in Uræmic Poisoning.—Dr. H. R. Noel, Maryland, Chairman.

On the best method of Treatment for the different forms of Cleft Palate.—Dr. J. R. Whitehead, N. Y., Chairman.

On Rank of Medical Men in the Navy.—Dr. N. S. Davis, Illinois, Chairman.

On Medical Ethics.—Dr. D. Francis Condie, Pennsylvania, Chairman.

On American Medical Necrology.—Dr. C. C. Cox, Maryland, Chairman.

On Medical Education.—Dr. J. C. Reeve, Ohio, Chairman.

On Medical Literature.—Dr. E. Warren, Maryland, Chairman.

On Prize Essays.—Dr. S. M. Bemiss, Louisiana, Chairman.

On the Climatology of—Maine, Dr. J. C. Weston; New Hampshire, Dr. P. A. Stackpole; Vermont, Dr. Henry Janes; Massachusetts, Dr. H. I. Bowditch; Rhode Island, Dr. C. W. Parsons; Connecticut, Dr. E. K. Hunt; New York, Dr. W. F. Thoms; New Jersey, Dr. Ezra M. Hunt; Pennsylvania, Dr. D. F. Condie; Maryland, Dr. O. S. Mahon; Georgia, Dr. Juriah Harriss; Missouri, Dr. George Engelman; Alabama, Dr. R. F. Michal; Texas, Dr. T. J. Heard; Illinois, Dr. R. C. Hamil; Indiana, Dr. J. F. Hibberd; District of Columbia, Dr. T. An-

tisell; Iowa, Dr. J. C. Hughes; Michigan, Dr. Abm. Sager; Ohio, Dr. T L. Neal; California, Dr. F. W. Hatch; Tennessee, Dr. B. W. Avent; West Virginia, Dr. E. A. Hildreth; Minnesota, Dr. Samuel Willey; Virginia, Dr. W. O. Owen; Delaware, Dr. L. B. Bush; Arkansas, Dr. G. W. Lawrence; Mississippi, Dr.——Compton; Louisiana, Dr. L. T. Pimm.

Secretaries of all medical organizations are requested to forward lists of their delegates, as soon as elected, to the Permanent Secretary.

Any respectable physician who may desire to attend, but cannot do so as a delegate, may be made a *member by invitation*, upon the recommendation of the Committee of Arrangements.

W. B. ATKINSON.

AMERICAN MEDICAL ASSOCIATION.

MEETING AT NEW ORLEANS, TUESDAY, MAY 4TH, 1869.

I am authorized by the Atlantic and Mississippi Steamship Co., of St. Louis, to say, that they will carry Doctors and their Ladies to attend the Meeting of the Association, at the following rates, viz.:

From St. Louis to New Orleans, each Passenger	$20 00
" Cairo " " " "	18 00
" Memphis " " " "	15 00
Returning,	
From New Orleans to Memphis, each Passenger	$15 00
" " " Cairo, " "	18 00
" " " St. Louis, " "	20 00

The Company start a first class Steamer from St. Louis every 48 hours, Sundays included, and the usual time from St. Louis to New Orleans, is about six days, and from Cairo to New Orleans, about four and a-half days. Passengers can go on any of their boats at the above rates, which includes meals and staterooms.

The Steamer which will, however, take down the great body of the Doctors, wishing to travel by the river, will leave St. Louis at 5 o'clock P.M., on Wednesday, the 28th of April; Cairo on Thursday evening, after the arrival of the afternoon train on the Illinois Cen. R. R.; and Memphis on Friday evening, reaching New Orleans from Monday noon to Tuesday morning.

Parties arriving by railroad, to take this boat, at either St. Louis, Cairo, or Memphis, had better make their calculations to reach the point of embarkation, at least one train in advance of the time of the boat's departure. But, if any one should arrive at Cairo or Memphis too late for this boat, he will find one or more boats passing for New Orleans every day, at ordinary fare.

It was deemed best to make the arrangement for a definite fare each way, so that one can go either down or up, or both, as he may choose, by the river, and know in advance just what he will have to pay.

To avail himself of this boat, one may apply on board, making it known that he is on his way to attend the Association, or, perhaps better, write me a line as early as convenient, stating how many ladies, if any, will accompany him.

Good Steamers, also leave Louisville for New Orleans every two or three days, occupying from six to seven days in the passage down. If a considerable number of Doctors should wish to take passage from Louisville, and would make application in a body to E. T. Sturgeon, Supt. Louisville & New Orleans Packet Co., at Louisville, or the Captain of a Steamer, starting at the proper time, he would probably give them a liberal reduction from the ordinary fare, which varies from thirty to forty dollars, according to the style and accommodation of the boat.

From Cincinnati no suitable boat can be taken through to New Orleans, but the Cincinnati & Louisville U. S. Mail Line, will take one going to the Association from Cincinnati to Louisville on one of their fine boats, and from thence to New Orleans by rail, for forty dollars, and return him on the same route to Cin. free. Two Mail Boats leave Cincinnati every day at 12 M., and 6 o'clock P.M., except Sundays, one at 12 M. I am not advised as to what arrangements have been made with other railroads.

JAMES F. HIBBERD, M.D., *Richmond, Ind.*

Second Attacks of Small-Pox.—It is no new thing for variola to attack persons a second time. Jenner refers to seventeen such cases among the nobility of England, more than half a century ago. Upwards of two hundred such cases were reported in London in 1851. In Wirtemburg 143 cases were recorded, of which 28 died. The proportion after inoculation is still greater. One instance is on record of five children having been inoculated with small-pox, successfully, four of whom subsequently contracted the disease, which was fatal to one of the number. An English surgeon is mentioned as having always an attack of small-pox after attending a patient with the disease.—*Pacific Medical and Surgical Journal.*

Sir Charles Bell's Discoveries.—To those interested in the discoveries of Sir Charles Bell, we commend the perusal of his pamphlet—"Idea of a New Anatomy of the Brain"—only three of the original copies of which are known to be extant. Its reprint with letters, now for the first time published, written by the author of the Essay to his brother, George Joseph Bell, between the years 1807 and 1821, in the number of the *Journal of Anatomy and Physiology* for Nov., 1868, is very opportune, as his exact claims have been often misunderstood, and at the present moment are attracting much attention both in this country and abroad.—*Med. News and Library.*

Puerperal Convulsions.—Dr. Fordyce Barker, in a clinical lecture recently delivered at Bellevue Hospital, summed up our knowledge on this subject as follows:—

First, That we have puerperal convulsions arising from uræmia, caused by Bright's disease of the kidneys.

Second, That we have convulsions associated with congestion of the kidneys and albuminuria, but it is not yet proven that the convulsions and the renal congestion bear the relation of cause and effect.

Third, That we have convulsions that arise from reflex irritation and congestion of the true spinal system, without evidence of any renal affection.

In relation to one point in the treatment, *viz.*, the delivery of the child, the principle which should govern us is this:—Whenever delivery by art can be effected with less irritation than would be produced by the continuance of the child in the parturient canal, it should be resorted to.—*Medical Record, Nov. 16, 1868.*

New Mode of Preparing Objects for the Microscope.—M. Rauvier proposes (Archives de Physiologie) a new and simple method, which consists in the employment of picric or carbazotic acid. This acid is only moderately soluble in water, and a saturated solution may therefore be employed. It possesses the further advantage of being very cheap. It is admirably adapted for all tissues containing much blood, and therefore for specimens of liver, lung, etc. It appears to act by effecting coagulation of the albuminous substances, though, unlike alcohol and chromic acid, it does not occasion any fusion of the constituents of the tissue. The red globules retain their form and characters extremely well. The portion of tissues required to be examined should be plunged into the solution, and after the lapse of twenty-four hours it will be found to have acquired sufficient firmness to permit of very fine sections being made with a razor. The saving of time by this method as compared with the chromic acid is immense. The preparations will take color from carminate of ammonia, and may be preserved in glycerine.—*Lancet, Nov. 21, 1868.—Med. News and Library.*

The *London Lancet* says:—"We know not whether our Scotch friends are more given to indulgence in spirituous liquors than are the English, but they have adopted a sensible and humane method of treating that form of disease—for it amounts to a disease,—an incontrollable love of alcoholic drinks. We have, on former occasions, earnestly called attention to this class of cases, in the interests of the drunkard and his family; but the liberty of the subject has proved a bugbear in the way of all legislation. People are beginning to adopt more healthy

notions, however, and the drunkard is not allowed to exercise his liberty at the expense of other people's health and happiness, quite so much as heretofore. We learn that the Lunacy Board of Scotland has adopted some action in the matter. In a report of a former year, an opinion was expressed that persons unable to resist the tendency to excessive drinking should be allowed to place themselves under control and treatment without authority from the sheriff. By the Lunacy Amendment Act, 1866, asylums are authorized to receive for care and treatment any person who expresses in writing to the Commissioners in Lunacy his wish to become a voluntary patient, and obtains their consent; and that this provision was taken advantage of in 1867 in Scotland by 17 persons: fourteen were admitted into public and three into private asylums. We would go a little further, and make it permissible to place such persons under medical restraint, where it could be shown by clear and unmistakable evidence that a drunkard exercised no control over his habits, but was ruining himself in health, and plunging his wife and family into destitution and misery."—*Medical and Surgical Reporter.*

Bromide of Potassium for the Sleeplessness of Infants.—M. Moutard-Martin has communicated to the French Academy of Medicine a memoir on "Some Applications of the Bromide of Potassium to the Medicine of Young Infants." Every one, he observes, admits the possession of sedative properties by the bromide, and in this direction it has become one of the most useful substances in the Materia Medica. Bearing in mind its hyposthenic action in erethism of the nervous system, and its innocuity, even in large doses, he believed that it might be employed with advantage in some of the pathological conditions of very young children. Among these, sleeplessness, alike mischievous to the infant and wearying to the nurse, is one of very common occurrence. The child does not seem otherwise ill, but has a very great insufficiency of sleep both by day and night, or only at night. Where a great variety of means has failed to remove this sleeplessness, the bromide succeeds in a remarkable manner, and M. Moutard-Martin adduces in his paper several cases in proof. His conclusions are:—1. The bromide of potassium given in small doses (from five to twenty centigrammes) is very well tolerated by young infants. 2. By its sedative action it cures *insomnia* in these cases. 3. Administered to infants suffering from the accidents of dentition, such as restlessness, *insomnia*, cough, etc., it frequently relieves

these; and it is probable that its employment, regulated with prudence, would sometimes prevent the occurrence of convulsions. 4. It should not be administered to infants when suffering from diarrhœa. 5. In certain exceptional cases in which the nervous erethism is predominant, its action is prompt and decisive.—*Medical Times and Gazette, Dec. 12, 1868.—Medical News and Library.*

THE NEW ILLUSTRATED EDITION OF WEBSTER'S DICTIONARY.—This seemingly dry and certainly ponderous book has its peculiar charms. Here is collected and tersely set down a vast quantity of various and useful knowledge, such as is indispensable to educated men and women. Here are an hundred and fourteen thousand words, defined with a clearness, fullness, precision, and wealth of illustration, that denote the soundest scholarship, and the most entire fidelity to laborious details. Altogether the work is a marvelous specimen of learning, taste, and thorough labor. We praise it heartily, because we believe it deserves the heartiest praise.—*New York Albion.*

SWEET QUININE.

DR. BULLOCK'S preparation entitled SWEET QUININE is made from the best Peruvian Bark, and has as positive and reliable tonic and anti-periodic power as the common bitter Quinine. Unlike the latter, however, it has no bitterness, but a sweet taste instead. THIS IMPORTANT ADVANTAGE constitutes its superiority for use by all—adults or children—who object to the nauseous bitterness of common Quinine.

Sweet Quinine is not offered as a *substitute* for common, bitter Quinine, but to *replace* its use, representing it thoroughly; may be trusted in the most important obstinate cases.

Sweet Quinine is to be used in all Intermittent or other Diseases requiring Quinine or Peruvian Bark. **In ounce bottles.**

SVAPNIA,

Or Bigelow's Purified Opium.

SVAPNIA is a new and desirable form of *Opium*, purified from all inert matter, such as *egetable fibre*, etc., and with the *Pappaverine, Thebaine, and Narcotine* of the drug removed entirely.

It represents the *Anodyne* and *Soporific* properties of Opium completely, whereas Morphia is but one of them. The alkaloids *Morphia, Narceia, and Codeia*, in this purified Opium, are in the combinations existing naturally in the drug.

It is made by assay: hence its *uniformity* is as great as that of Morphia, a very great advantage ove *crude* Opium.

It is solid and permanent, in scales like Citrate of Iron, can be readily powdered or solved in cold water. Patients will bear the *Svapnia* who cannot tolerate Opuim or Morphia. Its effects are more soothing and hypnotic than either.

Those compelled to use Opium habitually will find this much preferable to crude Opium.

Medium dose, for an adult, one grain. **In bottles of half and one ounce.**

Trial Parcels, to the value of Fifty Cents and One Dollar, will be sent, upon the receipt of the price, by mail, (post-paid), to those Physicians or others wishing to test Sweet Quinine, or Purified Opium.

The above preparations are manufactured only by

Frederick Stearns, Chemist, Detroit.

FOR SALE BY DRUGGISTS GENERALLY. At wholesale, at manufacturer's prices, by the Wholesale Druggists of Chicago, Milwaukee, Peoria, Dubuque, Indianapolis, and St. Louis.

1-'69-1y.

THE

CHICAGO MEDICAL EXAMINER.

N. S. DAVIS, M.D., EDITOR.

VOL. X. MAY, 1869. NO. 5.

Original Contributions.

ARTICLE XVII.

DR. MERRIMAN'S ADDRESS.

DELIVERED TO THE ALUMNI OF THE CHICAGO MED. COLLEGE.

BROTHER ALUMNI:

The constitution of our Society says, its first object shall be "to keep alive and perpetuate that kind and cordial feeling which binds us together by reason of our common *Alma Mater*"—which I understand to mean that we shall assemble here to have a good time; that we shall lay aside our pills, powders, and prescriptions, our saws, splints, and scalpels, our grave faces, and wise looks, and feel that we have so far conquered success, that we can afford for to-day to look around us and see what work we have done, not only individually, but collectively; that we can grasp each other's hands with hearty friendliness and congratulations upon the many successes the Alumni have had.

It is very pleasant to meet together as we are doing to-day—to see that *Alma Mater* is growing, as we perceive from the accession to our ranks of so fine a class as will to-morrow receive their diplomas—to meet many of our old associates, and to hear from others—how some of them are across the great waters, and some about to go, to pursue the same studies they commenced here so thoroughly—how others are winning for

themselves greenbacks, or laurels, or, better still, the love and gratitude of whole communities; so that to lose their doctor, or have any evil befall him, would be looked upon not only as a public, but, to each individual, a private loss.

Thus, the sons of our *Alma Mater* are growing in numbers, wisdom, and power; and the dear old Mother herself is not standing still. Within the last two years, four of her original faculty have added the value of an European experience to their previous thorough acquisitions, while three more have come to us fresh from those time-honored schools: and, not content with her previous requirements, *Alma Mater* is the first of American colleges to demand of her students three courses of lectures, and six months in each course, instead of the customary two courses, four months each, of sister institutions. With her progressive system, giving an entirely new course each year of the three, *our* college goes over nearly twice the ground of any similar institution in the country. The system adopted here is attracting great attention in Eastern cities. Professor Bumstead, in the "Introductory Lecture," at the College of Physicians and Surgeons, last fall, advised the students to choose from the course there given anatomy, physiology, chemistry, and materia medica, and to pay their attention chiefly to those studies the first year, and to the others the second year. Seeing, then, what she has done, and is doing, how proud we are of *Alma Mater* to-day; and I feel that each year as we assemble here we shall have new and greater cause for so pardonable a pride.

While we thus meet to revive old friendships and recollections, and to enjoy the social hour together, we ought not to forget to take home with us new determinations to work for the exhaltation of our noble profession, and to increase its usefulness. The success of one is an honor to all of us. Each new truth developed or old one made clear adds to the power of every physician, and gives the profession a stronger claim to the love and respect of the human race. Science has a claim upon each one of her votaries; and, as Sparta demanded that each subject should be a brick in her strong wall of defence,

so the great Genius of Medicine may say to each one of us,—"You must give me strength, or I shall become feeble."

Though some men have gone forth from our *Alma Mater* who are already wielding an influence, not only in their own locality, but upon science everywhere—still, our college is not old—few can *look back* to famous deeds; but the future opens to us, and—

> "As drops of rain fall into some dark well,
> And from below comes the scarce audible sound,
> So fall our thoughts into the dark hereafter;
> And the mysterious echo reaches us."

But those delightful echos from the unseen future, those dreams of high achievements, fame, and happiness, are not separated from us merely by a space of time; we cannot sit down at ease with any prospect of their being realized, nor will accident give them to any of us. Accident *sometimes* gives men a discovery which benefits the world; but, as a rule, the accident is merely the suggestion of a most thoughtful mind. The discovery of the pendulum and of the steam-engine required minds that could work out a great principle from events so common as to be scarcely noticed by ordinary men. Apples had fallen before human eyes for thousands of years before a mind like Newton's seized the suggestion, and deduced from it that wonderful law which binds the planets to the sun, and the great systems all in one.

We may safely lay it down, as a rule, that no man will accomplish anything to-morrow who does not accomplish something to-day. The surgeon who, in the future, will most creditably perform the great capital operations is he who, in the present, is most diligently preparing himself. In such an operation, the important moment to the surgeon is not when he takes his knife in hand, with the anæsthetized patient before him, but, rather, when in previous study he has gone over, *again and again*, every step of the operation, till he is as sure of it as the penman of his power to form a letter. If, then, we look for the causes of success, we shall find them in the early lives of successful men. Let us take a few examples of such

men, and see if we cannot draw from their early lives a lesson which, if applied to our own, will help us on toward the career we all desire. Demosthenes, the orator, inherited a most delicate constitution; but he overcame the defect by the most rigid temperance in food and drink, conjoined with a thorough system of exercise. He was troubled with a stammering speech and shortness of breath, which he overcame by the most incredible labor and perseverance. He shut himself up, for months at a time, to practice his beloved art, and copied the lengthy works of a noted author, whose style he admired, no fewer than eight times.

What American is not proud of the career of Benjamin Franklin, the printer boy, who became the eminent statesman? His father frequently repeated to him in boyhood:—"Seest thou a man diligent in his business, he shall stand before kings." He said he was reminded of this when at the court of France. His diligence in making opportunities, and in improving them when made, are too well known to you to need repetition. The man who could live upon saw-dust pudding and water *did not* need any man's patronage.

Sir Astley Cooper, though a wild and ungovernable boy, became, at the age of sixteen, a most indefatigable student of medicine. His diligence in anatomy was so great that he stood at the head of the class in the beginning of his second year; and, before he was eighteen, he was admitted to membership in the Physical Society—the oldest medical society in London. Entirely reversing his former habits, he spent his vacations in the closest study. He early became a teacher, and such was his professional zeal that, even on the day of his marriage, he gave his lecture in the evening, as usual. What result but success could follow such devoted labors?

Space permits me to cull merely a suggestion from these noted examples; but, through all the thousands that history records, we find this same precept enforced—"The hand of the diligent maketh rich."

I cannot resist the desire to mention one more example—that of one whom we have all learned to love for his large-

heartedness, and revere for his intellectual power and great accumulations of medical knowledge. It is unnecessary for me to mention a name; you will all recognize the man.

In early life poor, having hardly what is now considered a common school education, without influential friends, without opportunities, except such as he made himself, with, absolutely, no advantages, save a soul endowed with a determination *to do*, he began his career. Soon after, he graduated, the Medical Society, of New York, offered a prize for the best essay on "Diseases of the Spinal Column." He knew no more of the subject than the most recent graduate, but at once began to study it up; wrote the essay, and gained the prize. The next year, he gained another, upon "Discoveries in the Physiology of the Nervous System, since the time of Sir Charles Bell," in which were first mentioned many of the points that have since become generally accepted. Thus, he went on investigating new subjects, and writing new articles every year, always keeping on hand a list of obscure points for investigation. On removing to New York, he at once became Assistant to the Demonstrator of Anatomy, in the College of Physicians and Surgeons; and, while there, passed through the cholera epidemic of 1849. He remained but a short time in that city, and then came here. His history since, you all know—how from early morn till late at night, in storm and sunshine, in season, and out of season, he toiled and *succeeded.*

Although my description has been of only one man, he is but a type of our faculty. To their assiduous labors and enterprise, no less than to their intellect, do they owe their high standing in the profession.

Just here, the thought comes to me, "Who are are to take the places of the illustrious men of the present day, when they pass from the stage of active life?" Let each one of us ask himself—"May I not be among the number?" for each generation are offered the same prizes for the same endeavor.

The reason of most failures is, that men want a practice without earning it, and success without deserving it. He who is willing to pay the price of these things in labor and self-denial will surely gain them.

Work, then, first, to make yourself all you can be. Whatever else you do, don't neglect to grow. Remember that when you graduated, the close of the course was called "commencement," and not "completion." You were turned loose upon humanity as doctors; but with some little doubt as to whether you would prove destructive or not. "A little knowledge is a dangerous thing," you know; and those who rely upon what they gained at lectures only as sufficient will really prove dangerous. Our weapons are powerful for good or ill, according to the way they are used; and in an unskilful hand are always to be dreaded. I had rather trust a friend to the infinitessimals of true homœopathy than to the half-informed practitioner of the regular school; especially if he be heroic. Continue your medical studies; keep always on hand subjects for investigation, and study them; be an active member of medical societies; write for medical journals; always have a medical student, and be sure you instruct him,—for the surest way to learn a thing is to teach it.

Work, secondly, for influence, and then to use it aright. Physicians are becoming every year more and more men of weight in the community; and this will continue to be so as the profession becomes more advanced, and culture has more sway. Bring your influence to bear upon the prominent men, and the Legislators, that they may give correct votes on bills for legalizing dissections, and providing *materiel* therefor, also to pass laws restraining quackery, regulating practice and druggist's duties, and the sale of poisons; and urge your Medical Society to use its influence in the same direction.

Don't be discouraged at failure. The man who never failed is a myth; and, frequently, the men who have failed the most have become the most successful in the end.

It was a beautiful idea of the ancient Greeks—that classic people—to make Apollo God of medicine. Apollo, you remember, was God of the Sun—that symbol of life and peace and happiness. He was also God of music, which, among them, included all kinds of culture. Æsculapius was a kind of patron saint of physicians; but the real God of medicine was he

who united in himself manly grace and beauty with genial ways and the highest culture, of all the heathen divinities, the one who would to-day be called the truest gentleman.

Let us from him, too, draw our lesson; and, with all medical knowledge, mingle the kind disposition, the agreeable manners, and the general culture of the gentleman: but let us lift ourselves higher than to be merely disciples of Æsculapius or Appolo; and, as Christianity is higher than heathenism, let us rather be followers of Him who is the grandest model of all virtues, and who alone is called the "Great Physician."

ARTICLE XVIII.

THE BROMIDES.

AN INAUGRUAL THESIS, PRESENTED TO FACULTY OF CHCAGO MEDICAL COLLEGE, 1869.

By THOMAS G. WILLIAMS.

The bromides constitute a numerous and an important class of compounds. As medicinal agents they have of late attracted an unusual degree of attention. Although many of them are of great value, but a few have as yet been sufficiently investigated to justify us in feeling that we know much with regard to their medicinal efficacy. Those which have most attracted and are now attracting the attention of the profession are the bromides of sodium, potassium, ammonium, and to a certain extent quinia. With regard to the first three mentioned, the bromide of sodium is generally considered by all observers as of much less efficacy than the other two; and for this reason we will give it but little attention. The bromide of quinia has been tried in a few instances with apparent success; but as yet only a few observations have been made, and all that can be now said about it will be mere conjecture. As to the bromides of potassium and ammonium this is not true, for they have been used extensively, and many careful and comprehensive experiments have been made on them.

The bromide of potassium seems to be the favorite article in all the recorded observations, but for what reason I cannot tell. I am satisfied that the bromide of ammonium is the more useful as well as the more pleasant of the two, and deserves greater attention than is usually given to it.

After careful trial of the two, in many different circumstances, I do not hesitate to say that as a remedial agent it as far surpasses the bromide of potassium as the latter does the bromide of sodium. Why this is so I cannot explain, except in the same manner as some attempt to explain why the bromide of potassium is more efficient than the bromide of sodium. They say that the salts of potassium are all more efficient than the corresponding ones of sodium, therefore the bromide of potassium is the more powerful. For a similar reason the bromide of ammonium is more powerful than the bromide of potassium. We know from experience that most of the salts of ammonium are more decided in their effects than the corresponding ones of potassium. A good understanding of either of them, however, will suffice as a standard with which to judge the others; for they are similar in action, differing only in degree.

It has been a matter of considerable discussion whether the action is peculiar to the combination or to one of the elements. Some think that the base is the active ingredient, others that bromine is, while the majority of writers conclude that the salt as such, is the agent which produces the peculiar effect. Who ever saw any of the other salts of potassium or ammonium produce the effects derived from these under consideration; or who ever thought bromine produced such effect? It seems to me to be impossible to account for the phenomena produced when these salts are given, except to ascribe to them, as such, the peculiar virtue. Dr. Bill claims that double decomposition takes place with chloride of sodium as soon as it enters the blood, and that we virtually give bromide of sodium, which he regards as a substitute for chloride of sodium, with a chloride of the base given. This statement no one can hardly believe, after he has fairly studied the matter. We shall be better prepared to see the error of this statement as we progress.

We may, I think, without doubt regard the salt itself as the active agent, and that it continues as the salt given until its elimination from the body.

The thing to be done, now that these points are settled, is to find out how they act and the manifestations of their action. How do medicines act? This is a question yet unanswered; but the manifestations resulting from their actions are capable of being studied and described. It is not an easy thing to observe and to describe rightly these manifestations, as we may readily infer from the variety of opinions held concerning the different articles of the *materia medica*. This we shall see to be specially true with regard to the subject under consideration, before we have finished.

Most views entertained concerning the manner in which substances act when given as medicines, or taken in poisonous doses, have been extremely vague and unsatisfactory. They are often regarded as warriors, intelligent and ready to battle with and drive out of the system whatever does not belong there. Our text-books are so written that a student, in studying them for the first time, unavoidably comes to entertain these absurd views. It seems as though men dare not investigate this subject, but feel satisfied in believing that it is beyond the human power to explain. But this feeling is fast wearing away as organic chemistry unfolds to our observation things before inexplicable. Great minds are becoming unsatisfied with the old theories, and are looking about them for explanations in accordance with fixed and known physical laws.

Some writers have hinted that the bromides are efficacious, from their property of diminishing metamorphosis of tissue; a few claiming that it exercises no elective action, while others claim that it does, acting only on nerve tissue. McElroy has written a very ingenious article on this subject. It deserves a careful consideration at least, for I think it opens up a new course of investigations, even if the views therein contained are not true. He recognizes two grand processes as going on in the system, and terms them nutrition or constructive metamorphosis and oxidation or destructive metamorphosis. Medi-

cines, he says, may promote or retard either of these processes, thus giving us four classes of action to study. To illustrate, he says that chloroform arrests oxidation; strychina promotes it; calomel retards nutrition, and promotes oxidation. The bromides, he further says, owe their effects to the property of promoting the oxidation and consequent elimination of effete material, or that which is below the natural standard of development. He claims that these views are true beyond a doubt. How true they may be I am not prepared to say; but this I do know, that he has done much towards explaining how medicines should be studied. It will be impossible to say at present how the bromides do act; whether it is, as the ancients believed and indeed some of the modern observers as well, that they act as an intelligent creature, driving out the disease, or as a catalytic agent, acting by its mere presence; whether it diminishes metamorphosis of tissue, or whether it is in the manner explained by McElroy, which we have just noticed. But this we do know, that they act somehow, and give rise to peculiar manifestations, and are often of inestimable value to the physician in the cure of many diseases.

We will devote the remainder of our attention to the study of these effects. It might appear at first thought that this is easy. But we shall find, as we progress, that it is not so simple after all. There are many things, in the way of making observations, which will lead to the same conclusion under different circumstances. Our physiologists are so various in their views of life action that no real standard can be chosen from which to judge. The terms used by different observers are not understood alike by each. The circumstances under which experiments are conducted vary the results to a great extent. Indeed, it is not to be wondered at that men differ greatly, when we take everything into consideration.

Having derived splendid results from the use of the bromides, I was led to investigate the views entertained by different ones in regard to them. Though recently brought into notice, they have attracted very great attention. I was somewhat astonished at the variety of opinions adduced by different in-

vestigators. In order that we may the better reach the right conclusion, which we must do or our prescribing will be but mere empiricism, let us examine the conclusions reached by some of the best observers.

Eulenburg and Guttman, German observers, after elaborate experiments on frogs and some of the other lower animals, conclude that it (the bromide of potassium) is rapidly absorbed into the blood, that it is an intense cardiac poison, and that it paralyzes muscular and nerve action. Nervous and muscular irritability are both destroyed by its prolonged use. Its therapeutic action is anti-spasmodic, anti-convulsive, and anæsthetic. It has no direct hypnotic or narcotic action.

Ladorbe, a Frenchman, thinks that it acts only on the spinal cord, diminishing especially reflex action; that it has no effect on the circulation, mental action or sensation. Voluntary motion remains unaffected.

Damourette and Pelvet believe, as those above, that it acts through the circulation. They claim that it has no elective action, but that it acts on all tissues alike. The action is sedative, and is produced by direct contact. Nerve force yields most readily and heart action last. Therapeutic action is anæsthetic and a general sedative, acting specially on no particular function, but on all alike, and that by actual contact. Brown-Séquard terms it a nerve sedative, having no special influence otherwise. He says that it is indicated only where a sedative effect on the nervous system is required.

Bartholow, of Cincinnati, regards it as a powerful irritant to mucous membrane of the stomach and a vascular and nerve sedative. Therapeutically it is a disinfectant, escharotic, hypnotic, and sedative; but not indicated in cerebral congestion. Dr. Begbie, of Georgia, thinks it is a nerve sedative and a hypnotic, useful only in diseases of nervous origin. Dr. Bill, U. S. A., has made several series of investigations to decide on its physiological effects, and some of his conclusions are interesting. As before noticed, he says that we virtually give the bromide of sodium, which is powerless as a remedial agent. His conclusions are, that only the peripheral nerves of mucous

membranes are affected in the least, for as soon as it enters the blood it is changed into two powerless salts by double decomposition. If we gave sufficient to neutralize the chloride of sodium, we might get the peculiar effect of the bromide elsewhere from its local action. We get its peculiar action on the digestive tract and also on the urinary apparatus. It does not appear to me how this is possible, from his description, but it does seem that he has complicated things considerably. His article is long, but contains many peculiar inconsistencies. For instance, he speaks of its diminishing the elimination of carbonic acid gas, but as not affecting its formation in the system. It therefore acts as a soporific, by virtue of the retained carbonic acid gas. He also speaks of its peculiar action on the urinary organs, as well as many other things, which compel us to ask how this is possible, since none enters the circulation. It cannot be the effect of the bromide of sodium, for he tells us that this salt is like the chloride of sodium in its effects. As for the chloride of potassium, we know that it has no such effect. Thus we are almost compelled to doubt the truthfulness of his deductions, from the incongruities he has produced. However, in view of all this there is much practical information to be derived from the study of his article. The views of many others might be produced, if it were necessary. However, I think that I have noticed a sufficient number to enable us to form an opinion of the obscurity in which we are left when we seek an explanation of the "*modus operandi*" of the bromide of potassium, from the literature of the present day. We have seen that much difference of opinion exists. Some will say unhesitatingly that we get only a local action on the peripheral nerves of digestive and urinary tracts; others that it has a special action on nerve centres, or that the spinal cord is affected, or the nerves of sensation, excito-motor or vaso-motor nerves. Some say that it makes no distinction with regard to the tissues it selects; and in fact we may say that all manner of opinions are extant, even to saying that it has no effect at all. I could not be satisfied from what I could find by reading, so I determined to make observations for myself.

In order to make no mistakes and to avoid some of the sources of error, I made several experiments both upon myself and upon others. The results were so similar that I do not think it best to enter into a detailed account of each, but to produce what will be of use to us in this investigation. My first object was to find the effect of its prolonged use on the secretions, nutrition, and nervous system. From my reading I was led to think that circulation was but little, if at all, affected. I therefore had made no preparation for observing the effect on circulation and temperature. Some claim, also, that the effect is rendered peculiar, by the amount given. Not believing the notion that some advocate, of the different results derived from medicines when given in large or small doses, I made observations in order to satisfy myself on the action of the bromides in this respect. I found only a difference in degree of action between large and small doses. I do not understand why such a notion has become so common with our profession. We have various articles, for instance, which in small doses are called stimulants, but in larger doses they are called sedatives. I think it must be that we do not know what constitutes stimulation and what sedation. However that may be, we get a similar effect from the article under consideration under all circumstances, differing only in degree. The article which I used was manufactured by Powers and Weightman, Philadelphia. I took 10 and 15 grains three times a day for a considerable time. The results were so much like the following that I will not notice them here. When I had fully recovered my normal condition, I commenced taking ℈ij. 4 times a day and carefully noted the effect; and also had myself carefully observed by Dr. Cooper, in order that nothing might escape observation that would aid me in forming my conclusions. The urine was increased in quantity 3 or 4 ounces during the 24 hours, but the specific gravity was lowered 2 or 3 degrees as tested by the urinometer. Detected bromine in it within the first hour, but cannot say unhesitatingly that it was there in combination with potassium or whether with sodium, as Dr. Bill will have it. I think, however, that he is mistaken in regard to this as well

as in other things in his article, and that we may regard it as being there in the form of bromide of potassium, but did not demonstrate the truth by experiments. I did not make a quantitative analysis of the urine, therefore am unable to produce anything that would be interesting on this subject. Dr. Bill has done so, but I do not think his observations are sufficiently reliable to justify us in adopting them without further investigation. I will, however, notice a few of them in this connection. The chlorides, he says, are greatly increased. Soda is increased and potassa diminished. Uric acid increased; urea not affected. Urine higher color. I did not find the latter true in any of my experiments, but on the contrary a diminution of color. He says further that the elimination of carbonic acid from the lungs is retarded, but its formation is not interfered with. He thinks that some vital cause is the reason for this diminished excretion, and that it is confined solely to the pulmonary mucous membrane. The soothing effect of the bromides he ascribes to the retained carbonic acid. He claims that a constipating effect is produced. I observed no special effect in this direction. I noticed that the appetite seemed keener for the first few meals; subsequently a peculiar change takes place. It is difficult to describe the change, however, for it cannot be said that a disrelish follows, but more of a carelessness in regard to eating. The sensation of hunger is not noticed; but when we sit to a meal it seems that as much can be eaten, yet without producing the usual feeling of satiety. Digestion is carried on apparently as well as ever, and no unpleasantness in the least follows a hearty meal. We conclude that the effect on digestion is to diminish the desire for food, the power for taking and assimilating remaining unaffected. The muscular system seemed relaxed and incapable of being used with the usual vivacity. I think, however, that this is not so much from the effect on the muscular system as upon its vital stimulus, the nervous system. I feel satisfied that the contractile property of muscle is but little, if at all, affected. We shall see more on this point as we progress. The cutaneous system is so affected that I am led to believe that it also affords

a channel for elimination of the bromides. After one of the experiments, a very painful carbuncle came upon the back of my neck, which suppurated scarcely any. I cannot say that it had any connection with the taking of the bromide, yet I noticed at each subsequent trial that a peculiar little boil would show itself near the site of the old seat of trouble. But slight suppuration took place in any of them. There was a minute slough in each one, and the lymphatic glands were swollen and very painful in the region of the boils. I have observed this only on myself, and consequently cannot say that this was the result of the medicine. I believe, however, that these were from the effect of the large quantity taken, for the inflammations were peculiar, having never noticed anything like before; and they disappeared when I left off my experiments. But another affection presents itself as regularly as its use is persisted in. It is a minnte vesciculo-papular eruption, which causes an intense itching and which does not disappear for a considerable period after discontinuing the bromides. I infer from this that it finds exit through the skin, as well as the kidneys, and acts as an irritant to the sudoriferous glands.

During these experiments I became satisfied that the circulation was materially affected, and I made a special series of observations for the purpose of determining its real effect on temperature and circulation. The results I will produce further on. In regard to the effect on the nervous system, I must acknowledge the great difficulties to be overcome and the almost utter impossibility of being certain in the observations made. Even if one feels certain himself, he lacks the means of making it mechanically manifest, as can be done with the temperature, circulation, etc. Of all the systems we have yet noticed, the nervous was most impressed; indeed, I am of the opinion that this is the part primarily affected, but the results of the nerve change are variously manifested. The nerve tissue is endowed with certain properties which it will be best to notice before discussing the influence exerted on them. In common with other tissues, it contains the primary properties susceptibility and vital affinity; also properties peculiar to

itself, impressibility and transmissibility. We have to do more especially with the last two named. The important relations which these properties sustain to the system at large make them objects of unusual interest, and need to be well understood. A slight impression on one or both of these properties has a great effect on the vital economy. Thus, through its receptivity or impressibility, the nervous system is made cognizant of the wants of the entire organism, and through the property of transmissibility it responds to the various calls upon it.

The functions of the nervous system are so various that it will be wholly impossible to notice them all. The receptivity of my nervous system was considerably diminished. Injuries were more easily borne, and the effects of heat and cold were not so easily noticed. Indeed, there was nothing that pertains to this function which was up to the normal grade of acuteness. As before noticed, the desire for food and drink appeared lessened, yet they were present, as the power of partaking and the relish felt for them will testify. A peculiar feeling of fullness of the head was present each time, but it was not an unpleasant sensation. No headache was present during any of the time, but on the contrary the usual causes failed to produce any. Study I could not, nor had I the faculty of concentrating my attention on anything. The best lecture would be but partly noticed. Memory for some reason was less reliable than normal, but I do not think it resulted from anything except the lack of ability to fix my thoughts. My feelings were what some would term pleasant, for I cared but little what transpired about me. The excito-motory nerves have their transmissibility diminished, which I think accounts for the muscular relaxation which was present. The sensory nerves are also diminished in their power of taking impressions. The secreto-nutritive nerves of Brown-Séquard I think are also more or less diminished in their function. I could not demonstrate this to my own satisfaction, however. I infer this more from the condition of my appetite and the long continued relaxation of habit, which remains after the bromides have been left off. Some claim that

the reflex action of the cord is alone affected, but I am satisfied that the action is more general, as regards the nervous system. Its soporific effect has been greatly overestimated by some. I have never been able to find that it compels sleep like morphia. Still I have seen sleep follow its use, where morphia had failed entirely. It is true that when I was taking large quantities I could sleep when I pleased, and so long as I pleased; still I could, by an effort of the will, overcome the desire, and when asleep could be easily awakened. When I was awakened from such a sleep, my mind would be as clear as before sleep, and the desire to fall asleep again could be easily overcome. We see that it differs much from morphia and its allied products. They compel sleep, in spite of all opposition, when given in sufficiently large doses to produce their specific effects, while the bromides permit sleep. They calm the person if excited, or diminish his power for thought and for fixing the attention, and sleep follows as a consequence. Its anodyne properties have also been overestimated. This, like sleep, is only produced secondarily.

But the great point which prompts me to record these observations, and which I think will account for the action of the bromides better than any opinion yet produced by observers, remains to be noticed. I refer to the effect on circulation. I was unprepared, from my reading, to believe that such an effect was produced. All observers, nearly, either overlook or wholly deny that it has an effect on the circulation. One or two have hinted that some effect is produced, but have left it unexplained, so far as I know. Feeling certain that an effect was produced on the circulation, I procured a Marey's sphygmograph to see how it was affected. I also used an axillary thermometer to take observations on the temperature. I found out that the relation between large and small doses holds true in regard to circulation. In order that the result would be more manifest, I made use of pretty large doses, though not larger than are often given medicinally. My general health was good when I commenced the experiment which I will now

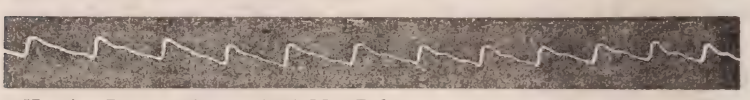
record. My normal temperature is 98½°, pulse 78 to 80 per minute. I had noticed that my pulse was frequent for a considerable length of time, and waited for it to reach its normal frequency. Not appearing to change any and being normal in all respects except in frequency, I did not see fit to wait longer. I made other interesting observations, but will record but one in full.

This experiment was commenced on Jan. 1st, 1869, and was continued through four days. Temperature was taken under the tongue, by Teiman's thermometer graduated to ¼ degree. The following are the delineations:—

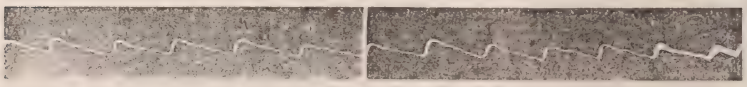
No. 1.—January 1st, 11 A.M. Pulse, 90; temperature, 100¼°. Normal.

No. 2.—January 1st, 11 15 A.M. Pulse, 88; temperature, 100°.

No. 3.—January 1st, 11 30 A.M. Pulse, 85; temperature, 100½°.



No. 4.—January 1st, 11 40 A.M. Pulse, 80; temperature, 100°.

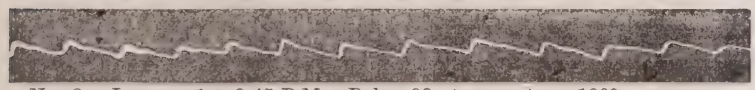


No. 5.—January 1st, 11 50 A.M. Pulse, 79; temperature, 100°.

No. 6.—January 1st, 12 M. Pulse, 78; temperature, 100°.

No. 7.—January 1st, 12 15 P.M. Pulse, 75; temperature, 100¼°.

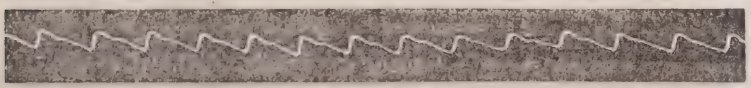
No. 8.—January 1st, 12 45 P.M. Pulse, 74; temperature, 100°.



No. 9.—January 1st, 3 45 P.M. Pulse, 82; temperature, 100°.

No. 10.—January 1st, 7 P.M. Pulse, 75; temperature, 99°.

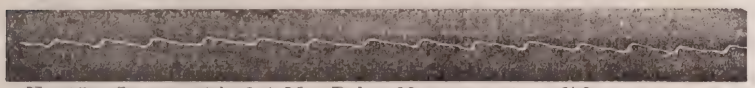
No. 11.—January 2d, 1 P.M. Pulse, 80; temperature, 98¾°.



No. 12.—January 2d, 10 P.M. Pulse, 83; temperature 98½°.

No. 13.—January 3d, 8 A.M. Pulse, 92; temperature, 98½°.

No. 14.—January 3d, 10 P.M. Pulse, 70; temperature, 98½°.



No. 15.—January 4th, 8 A.M. Pulse, 90; temperature, 97°.

No. 16.—January 4th, 12 M. Pulse 90; temperature, 97°.

No. 17.—January 4th, 12 15 P.M. Pulse, 90, temperature, 98½°.

The amount which I took was ℥ss., four times a day, for four days. The last four doses were bromide of ammonium. I took the first dose immediately after impression No. 1.

It is necessary to explain each of these separately, or mistakes are sure to be made. The sphygmograph delineates the volume and frequency, but the delineation of force is apt to mislead, and the deception can hardly be avoided except by a close watch through feeling the pulse, in addition to delineations, and noting carefully the condition under which each one was taken.

No. 1, which is an impression of the pulse unaffected by anything except ordinary exercise, shows a firm and a moderately full beat, with considerable frequency. If we compare the succeeding ones, taken during the effects of the bromides, we cannot fail to observe the difference. Nos. 4 and 16, when compared with No. 1, show a great difference.

The first eight were taken without removing the instrument, and extend through two hours and three-quarters; and we obtain very uniform results, especially with regard to frequency of pulse. The temperature appears to remain unaffected at first, but from prolonged use it becomes decidedly lowered. At first glance one might notice a want of uniformity in the results; still, as we shall see presently, the strictest uniformity prevails throughout. At first it has an apparent stimulating effect, as shown by numbers 1, 2, 3, and 4; but let us examine more closely. The volume of the pulse, it is true, is greatly increased, but it is at the expense of firmness. Instead of a firm, sharp stroke, we have now one which is soft and compressible. The amount of blood which passes by a given point, in a given time, is less in No. 4 than in No. 1. Thus we have at first the pulse diminished in force and frequency, and increased in volume. From No. 4 to No. 8 the force and frequency continue to diminish. No. 8 compared to No. 1 does not show a very great difference of delineation; yet they are impressions of very different conditions of the circulation. No. 8 is compressible and has a difference of 16 pulsations per minute. Numbers 11, 15, and 16 are those taken after a period of rest. They are exceedingly soft, especially Nos. 15 and 16. We notice quite a change in temperature towards the last, it having diminished from $100\frac{1}{4}°$, as shown by No. 1, to 97°, as

shown by No. 16. Numbers 9, 10, and 13 show the effects of moderate exercise on the circulation, when compared with those taken after a period of rest; while Nos. 12 and 14 are impressions of pulse taken after violent exercise. They indicate a labored action of the heart, as it endeavors to supply the wants of the system, yet they too are soft and easily compressible. I thought it would not be safe nor discreet to carry the effects farther than is shown in No. 16. In order to see the effect of a diffusive stimulant in this condition, I took ar. spts. ammon. and tr. camph. āā ℥ss. immediately after taking impression 16. Without having removed the instrument, I took impression 17 fifteen minutes after the stimulant. A very great change took place during this short time. The temperature raised one and one-half degree, while the pulse became quick, firmer, and irritable. This stimulating effect continued to increase for a considerable time. My head ached very severely as soon as I commenced getting under the influence of the stimulant, and continued aching until I took a good dose of bromide of ammonium. The subsequent delineations were of no unusual interest. They showed an increase in the force of circulation. My head never ached before, when I left off the bromide. I would gradually come out from under its influence, not feeling natural in less time than one week.

No one can say, after having carefully noticed these results, that circulation is not affected by the bromides of potassium or ammonium. I am aware that some will say that this will not be sufficient to base any conclusions upon. Anticipating this objection, I made various observations on different individuals, and the same result followed in all cases. This does not arise from any idiosyncrasy of mine, but is the uniform effect of the article in all cases. As regards preconceived notions, I can say that my conclusions are in no way affected by them. If I had any notions whatever they were all overturned in this investigation.

Now it is necessary to find out how this effect on the circulation is produced. I believed at first that the muscular coat of the arteries had its contractility diminished and that the effect

was produced in this manner; but subsequently I became satisfied that if it was at all affected it was but to a slight degree. This I think is proved by the effect of stimulants and exercise, as shown in Nos. 12, 14, and 17. The vaso-motor nerves preside over circulation by bringing nervous influence to bear on the muscular fibre of the vessels. The walls of the vessels are highly elastic, and the contractility exactly corresponds to the dilatibility under ordinary circumstances. This property aids very greatly in aiding circulation. The arteries are distended by the vis a tergo of the heart, and the pressure of this blood affords a stimulus to the vascular coats causing them to contract, thereby sending the blood forward in its course. The heart is also endowed with the same property, but owing to its great power it will not succumb so readily as the arteries to agents which act upon them. Remembering these facts, it can readily be seen how such a condition of the circulation is produced. This can be produced in various ways: for instance, if the property of contractility is diminished, or the impressibility or irritability of the walls is lessened, or if the motor nerves have their function diminished, the same result will be produced.

In this case we have to do more with the nerves distributed to the vessels than with the vessels themselves. The power to respond to a stimulus remains in the arteries and heart, but the nervous supply is materially diminished in its function. The smaller arteries have much to do in the propulsion of the blood and in regulating the supply of blood to different parts of the system, by virtue of their muscular coat. Very many diseases are much influenced by this property of the arteries. In their normal condition the dilatation of their walls by the blood, which has been propelled forward by the heart, causes a corresponding contraction. This contraction differs from that which we find in the larger arteries and in the veins, on account of the muscular fibre contained in the coats of the smaller arteries.

The bromides change the action of these arteries, so that it more resembles the action of a vein, being merely a passive channel. We can see this beautifully shown in the first 8 de-

lineations. No. 2 shows how soon the dilatability is increased, but the contractility is but little weakened. No. 4 is the last one which shows that contractility still acts equal to the dilation. After this we see a manifest lessening of the contractile power. During rest we see, as shown by No. 16, that the contraction is nearly absent, leaving the artery in an almost passive condition.

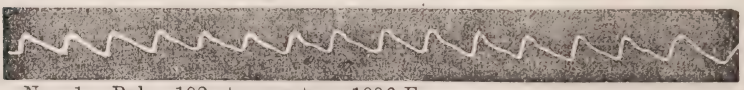
This will explain much of the efficacy of this article in disease, as we shall see further on. The surface of the body has a red flush all over, owing to the quantity of arterial blood which distends the smaller arteries and the capillaries. The difference between this condition and venous congestion is very marked; still the color is not that given by thoroughly oxygenated blood, owing to the tardiness of the circulation, which prevents it from being brought to the lungs sufficiently often. This causes a peculiar sense of fullness in the head, which is not at all unpleasant. I believe with Dr. Bill that there is also an excess of carbonic acid retained, still I do not believe as he does that the calmative property is owing wholly to this carbonic acid. I do not doubt that it has some effect in this direction, probably similar to that produced in an illy ventilated or crowded room.

In summing up the results of my investigations, I conclude: that it is the combination which causes the peculiar action, and not the bromine or the base; that it is quickly absorbed into the circulation and acts through the blood; that it is not decomposed to the extent claimed by Dr. Bill; that it produces an effect in a very short time after it is taken, and this effect is somewhat prolonged; that this effect is not dangerous within certain limits; that the primary effect is on the nervous system, diminishing all its functions somewhat, though more powerfully affecting its excito-motor and vaso-motor properties; and that through this influence on the nervous system the circulation, motion, sensation, mental action, etc., etc., are more or less affected, though not to an equal degree in each case.

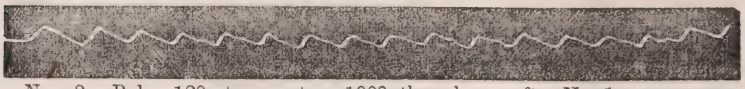
With what we have learned of the action of the bromides in the healthy condition, we can more intelligently study the

"rationale" of their action in disease. Owing to the want of a proper knowledge in this respect, they are in danger of becoming unpopular, as too often happens with new remedies. They have been highly recommended in diseases where they can be of no earthly use, and even where they are contraindicated. By wisely discriminating, we shall find the bromides of great value in very many diseases. However, if given alone they are rarely curative like the iodide of potassium, etc., but act only as palliatives. We shall find them of great temporary benefit in all spasmodic affections, from terrible hydrophobia to the merest muscular twinge; also in all cases of nervous excitement, from maniacal delirium to the wakefulness of the hard thinker; but in no case will they act as curative except where the exciting cause is temporary. We should not rely on them wholly in such diseases as hydrophobia, puerperal convulsions, cholera, epilepsy, etc., where the cause will not be exhausted in a short time of itself; but to allay the spasmodic symptom of these diseases we have no article comparable to these; but in delirium tremens and those diseases in which the cause will soon become extinct we can rely on them alone. What has been said with regard to the muscular coat of arteries is equally true with regard to the muscular coats of the various ducts of the body; for instance the renal, the biliary, the ejaculatory ducts, etc.

We have far more potent anodynes than these, though they do blunt the sensibility to a certain degree. In this connection I will produce two sphygmographic delineations in order to show how a very irritable, quick pulse is affected. The subject was laboring under a subacute attack of pneumonia:—



No. 1.—Pulse, 102; temperature, 100° F.



No. 2.—Pulse, 120; temperature 100°, three hours after No. 1.

No. 1 was taken to see the condition unaffected. I then gave bromide of ammonium ℈ij. In three hours No. 2 was

taken. No. 2 has lost the irritability present in No. 1, being soft, frequent, and compressible. The person felt no effect from the dose. It will be profitable to examine the manner of their action on a few special diseases. It has become very popular, and that with good reason, in the treatment of that terrible disease, epilepsy. Some have been greatly disappointed, however, but it resulted from not remembering or knowing that it has only a palliative action and that if the cause of the convulsions is not removed they will return so soon as the effects of the bromides have passed off.

Much difference of opinion has existed with regard to the pathology of this disease, and I think the opinion generally held at present is very much out of the way. It can be proved beyond a doubt, I think, that epileptiform convulsions of every variety are caused by a sudden anemia of the brain and spinal cord. There is a great variety of these convulsions, which are reducible to this class. Puerperal convulsions are but an attack of epilepsy under peculiar circumstances. Rigors, etc., are caused by anemia of the spinal cord. Now this anemia is caused by a spasm of the arterioles, distributed to the brain and cord.

We can easily see now how the convulsions and rigors are prevented by the bromides. In them we have nearly a specific for delirium tremens. In this disease we have the circulation irritable and the blood very deficient in nutrition. Now by retarding the flow of arterial blood it imparts to the brain more nourishment than it would if hurried, as it really is, during the excitement of the disease. Where it is superior to opium is in the fact that it causes arterial congestion, whereas opium causes venous congestion. We can easily see the advantage and find an explanation why it so often causes sleep in this disease when morphia has failed. It requires no explanation why it is useful in the passage of renal and biliary calculi; how it prevents seminal emissions, chordee, etc.; why spasmodic croup, asthma, whooping-cough and like diseases are so greatly relieved by the bromides.

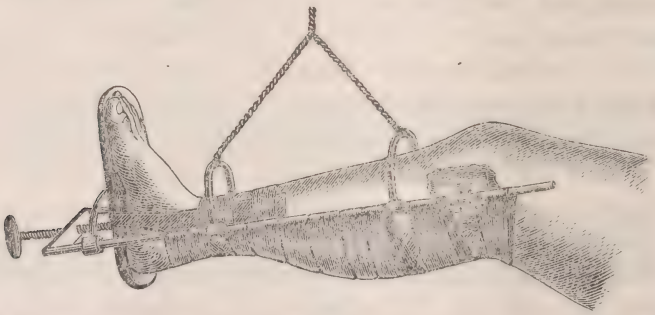
How well I may have succeeded in convincing others of the

truthfulness of these conclusions I cannot tell; but I feel satisfied in my own mind that they are the only views that have afforded a good explanation of the effects of the bromides in disease. I have been well repaid, by the satisfaction I derive from being now able to view their effects in a rational aspect. I do not think that I have claimed more for them than facts will allow. If this meets the approval of my medical brethren, well; but if it does not, all that I ask is that some one produce something better as an explanation, and I will be ready to give up these views. Until then, I can but regard these views as affording the true explanation of the action of the bromides.

ARTICLE XIX.

A NEW FRACTURE APPARATUS.

A new dressing for fractures of the leg has been devised by Dr. E. D. Kittoe, of Galena, late medical inspector U. S. A., which, on account of its convenience and capability of being made by an ordinary mechanic, is deserving of commendation. It consists of two steel or iron rods a quarter of an inch in diameter and thirty inches in length. These are connected by a cross-bar at one end and by two sliding semicircles intended to go over the front of the leg. The accompanying engraving will illustrate the form:—



A foot-piece of wood sits between the rods, and is suspended to a steel semicircle by a clamp screw, so as to allow of its

being turned in any direction, and also drawn to and fro on the rods, which are loosely clasped by the semicircle. The foot of the patient is attached to the board by adhesive straps either passed around the foot itself, or up the sides of the leg, as shown in the engraving. Through the cross-bar at the end of the rods passes a screw ten inches long, which is attached to the foot-piece by a swivel joint. By these means the foot-piece is drawn down, making extension with any desired force. The counter-extension is made by two broad, thick pads, attached near the upper extremities of the side rods by clamp screws, so that they can be adjusted to any necessary length. These pads press against the bulge of the tibia on each side, just below the knee, and may be fitted to variable sizes by extemporized pads placed under them, thus making effectual counter-extension. The limb is supported between the rods by passing a bandage to and fro beneath it exactly in the manner of Smith's Anterior Splint; and the whole is then suspended by a branched cord to a hook in the ceiling, or to a wire arch under the bed-clothes. The branched cord is of course attached to the two sliding arcs which attach to the rods, as seen in the wood-cut.

The only cases where this splint cannot be used would seem to be those in which there has been contusion about the knee, so that the patient cannot tolerate the pressure of the counter-extension pads; but even in these cases it would have all the advantages of Smith's Anterior Splint, while in all other cases it adds to the merits of Smith's apparatus the benefits of perfect extension and counter-extension. It is a great comfort to a patient to have the free motion of the limb allowed by suspension, without losing the advantage of extension, or risking the displacement of the bones. Both these objects are gained by Dr. Kittoe's apparatus.

EDMUND ANDREWS, M.D.

81 Monroe St., Chicago.

ARTICLE XX.

THE OXYGEN MIXTURE AS AN ANÆSTHETIC.

By E. ANDREWS, M.D., Prof. of Principles and Practice of Surgery in Chicago Medical College.

Some months since I gave in the *Examiner* an account of my experiments in the use of a mixture of free oxygen and laughing-gas as an anæsthetic. Special circumstances interrupted for a time my investigations, but the following recent case will serve as an additional example of the action of the mixture:—

Mrs. W. had a fatty tumor on the back of her neck, which she wished removed at her residence. The mixed gas was accordingly carried there in a rubber sac and administered by Dr. Rogers. The inhaler was a silver mouth-piece inserted between the lips, and spreading between the lips and teeth so as to allow of no admixture of atmospheric air. Valves allowed the inspired gas to come from the sac, and the expired air to pass out of an opening into the atmosphere. Thus being prepared, the inhalation commenced. In seventy-five seconds the patient was anæsthetized, presenting a sort of pallor of the lips and slight blueness of the veins, but none of the dark asphyxiated flush and labored breathing produced by unmixed laughing-gas. I proceeded to extirpate the tumor, occupying two minutes in the operation, which I accomplished without any consciousness on the part of the patient. The inhaler was then removed from the mouth, and the patient recovered her senses in about two minutes, waking up pleasantly, without nausea or discomfort. The blood from the incision was a little darker in tint than usual, showing that there was not quite free oxygen enough in the mixture.

Chicago, No. 81 Monroe St.

Original Translations.

THE PHYSIOLOGICAL ACTION OF THE SULPHATES OF POTASS, SODA, AND MAGNESIA WHEN INJECTED IN THE BLOOD.

By MM. F. JOLYET AND CAHOURS.

Translated for the *Medical Examiner*.

We propose in this article to demonstrate—

1st. That the neutral salts (sulphate of soda and sulphate of magnesia) which are daily employed as purgatives in the intestine do not produce purgation, when injected in the veins.

2d. That these same injections enable us to distinguish the sulphates of potass, soda, and magnesia by their poisonous properties, and their physiological effects.

Physiologists frequently have injected the different salts of potassium and sodium in the blood, for the more special purpose of distinguishing these two alkaline metals by their poisonous properties. The most delicate experiments on this subject have been made by M. Grandeau. (*Vide Journal de l'Anatomie et de la Physiologie, etc.*, by M. Ch. Robin, 1864: Experiments upon the Physiological Action of the Salts of Potassium, of Sodium, and of Rubidium.) They show—

1st. That the salts of soda can be introduced in the circulation without producing accident, and that very large doses do not lead to fatal results.

2d. That the salts of potass, injected in the blood, are eminently poisonous, and that very minute portions suffice to produce a frightful death.

The experiments of M. Cl. Bernard have taught that the salts of potass direct their action upon the muscular tissue, and that death, caused by the injection of these salts in the blood, is due to the sudden arrest of the heart, before the cessation of the respiratory movements. In his investigations upon the physiological action of the salts of potassium, and of sodium, P. Guttman (*Berliner Klinische Wochenschrift*, 1865, Numbers

3435 and 3436,) examined more closely than any one had before him the mode of action of these compounds. According to his observations, all the salts of potassium (with the exception of bromide and iodide, and some salts, the acid of which is poisonous in itself) have an equally toxical property, and all act directly upon the heart. They diminish, at first, the force and frequency of its pulsations, and they effect its arrest by paralysis of the muscular action of the organ, which, once at rest, does not react under electrical excitement. The greatest difference between the physiological action of the salts of potassium and the salts of sodium is, that the latter exercise no influence upon the heart—as Blake has already observed (*Edinburgh Medical Journal*, 1839).

Upon these two points—poisonous properties, and intimate action of the salts of potass—our experiments with the sulphate of potass, alone, confirm the data already given.

What the action of the salts of magnesium, and, particularly, of the sulphate of magnesia, may be, has not been investigated very thoroughly, at least to our knowledge; and we should hesitate to accept the opinion of M. Rabuteau (*Etude experimentale sur les effets physiologiques des fluorures et composes metalliques en general; These de Paris:* 1867), who, after one experiment with the chloride of magnesium, concluded that this metal is as entirely harmless as sodium.

SULPHATE OF POTASS.

The experiments we are about to report are designed to show the action which the sulphate of potass exercises upon the heart and the muscles. To evince clearly the action upon the heart, it is necessary to experiment upon an animal, withdrawn from all causes that can modify the rythm, and the frequency of the pulsations of this organ. To accomplish that, we have employed the method of double poisoning. We have made our experiments upon dogs subjected to the influence of curare, until the excitability of the motive organs by electricity is completely destroyed. By this procedure, and maintaining an artificial respiration, we can expose the heart to view, and observe, directly, the troubles arising from the introduction of a foreign substance in the circulation.

Example I. July 8th, 1868. Poisoned a small-sized bitch, by injecting under the skin some centigrammes of curare, in solution. After a short time, signs of poisoning manifested themselves. Artificial respiration was maintained for an hour. At that time, the sciatic nerve laid bare was no longer excitable. The heart was exposed; the pulsations were very regular, but sufficiently frequent. (The two pneumogastrics were severed.) At 9 h. 55 m., two cubic centimètres of a solution of sulphate of potass of 10e (that is, 20 centigrammes of sulphate of potass) were injected carefully in the left crural vein.

The phenomenon which suddenly manifested itself in the region of the heart was a diminution, a kind of hesitancy, in the pulsations.

This diminution, which was only transient, was succeeded, almost immediately, by a greatly accelerated action; there were, as far as one could judge, a-third or a-half more strokes than before the injection.

Then came a time when the pulsations were disturbed. They presented an accelerated series, separated by moments of cessation—a series of vigorous throbbing, followed by feeble action. Then, the pulsations became less and less frequent, and were replaced by the partial and, as it were, vermicular contractions of the ventricle, which became distended, in a measure, by the blood, which it could no longer expel. 10 h. 1 m. Complete cessation of the heart in diastole. The blood of the heart, collected in a saucer, coagulated with great rapidity.

This experiment has been repeated three times with identical results. With dogs of small size it was sufficient to introduce two and three cubic centimètres of the solution of sulphate of potass to produce the trouble of the heart, and its complete arrest, in some minutes. In another series of experiments, we have practiced injecting sulphate of potass in the blood of frogs.

The following is the process at which we have arrived:—

We make the injection in the arterial system. In order to do that, we expose the terminal part of the aorta and its bifurcation into the two iliac arteries; and it is in one of these arteries that we introduce a fine canula and make the injection.

The canula of the syringe is introduced in the artery, very near the aorta, in such a manner that when the liquid is injected, by the eighth of a drop, from the syringe of Parvas, that which passes immediately into the artery of the opposite side diffuses itself throughout the corresponding posterior member, and is returned immediately to the heart by the venous system.

This method has the advantage, at the same time, of isolating one of the members of the animal (the posterior member, in the artery of which the injection is made) from the action of the substance.

Example II. 2 h. 26 m. 15 centigrammes of the solution of sulphate of potass, of 10e, are injected in the left iliac artery of a green frog, whose heart beats 70 times in a minute.

While the injection is made very carefully, slight fibrile contractions are observed in the muscles of the thigh, then in those of the calf, and some trembling of the toes of the right side. These contractions, which impart a little rigidity to the member, cease in about two minutes. The limb, released and extended, does not retract.

2 h. 30 m. The heart is observed; 20 pulsations a minute. The ventricle remains a comparatively long time in diastole. Its contraction is unequal; some parts of the ventricle close, while others do not empty themselves. The auricle contracts with difficulty and irregularity.

The frog, being released, executes some energetic movements of the right hind foot; the left remains extended and paralyzed. Feebleness of the anterior parts, which are somewhat depressed, sensibility preserved throughout.

2 h. 38 m. 50 pulsations of the heart; more regular; the auricle contracts with more power; repose of the heart more or less prolonged from time to time. Motion begins to return in the right posterior member; and the thigh flexes itself gently upon the body.

2 h. 50 m. 60 beats of the heart; full and regular.

4 h. 10 m. Normal condition of the frog:—right posterior member very active; left posterior member (vessels ligated) grows paralyzed.

Example III. The arteries and lumbar nerves of a large frog are severed; and, at 12 h. 52 m., 20 centigrammes of the solution of sulphate of potass are injected in the left iliac artery. During the process of injection, the fibrile contractions, which, at that time, usually manifest themselves in the right foot, are not apparent.

1 h. The lumbar nerves of the right side are excited by employing the forceps of Pulvermacher. No contractions in the muscles of the foot. The same excitant directed against the muscles of the foot fails equally to provoke any contraction.

On the contrary, contractions are plainly evident when the forceps are applied to the muscles of the left foot (vessels ligated). Besides, the animal executes some energetic movements with this foot.

1 h. 5 m. and 1 h. 10 m. Same results—non-excitability of the muscles on the right; excitability on the left.

1 h. 20 m. The muscles of the right thigh begin to contract. This is shown likewise by electricizing the lumbar nerves. The part is nevertheless paralyzed.

1 h. 35 m. Spontaneous movements in the right hind foot, which has regained its energy, in a great measure.

Among the frogs, the difficulties arising in the heart's action are only transient, and have never occasioned the arrest of that organ. The reason is, the doses of sulphate of potass (1 to 2 centigrammes) are too small.

The same hesitation, the same irregularities in the cardiac pulsations, are observed, either when the frogs are well or previously poisoned by curare. Only one phenomenon is lacking, in every instance, among the frogs under the influence of curare, that is, the muscular fibrile contraction, that, in the healthy frog, almost invariably manifests itself in the posterior member, where the liquid of the injection passes immediately.

Sulphate of Soda.

The almost absolute harmlessness of injecting the salts of soda in the blood enables us to determine whether the sulphate of soda, injected in the veins, purges, as when given by the intestine.

A priori, and, by analogy, it seems to be thus. It appears perfectly natural that the same as an emetic injected in the veins produces vomiting, Glauber salts should purge. It is undoubtedly upon these data, only, that cathartic properties have been attributed to the sulphate of soda injected in the blood.

Example IV. July 27th, 1868: 11 A.M. 12 grammes of sulphate of soda dissolved in 40 grammes of water were injected in the crural veins of a dog weighing 10 kilogrammes. Immediately after the injection, and even before it was terminated, the respiration of the animal growing embarrassed became difficult and wheezing. This trouble continued a little time, and, presently, respiration was natural. The animal released and placed on the ground went about the laboratory, appearing a little more feeble in the posterior region, and after a time laid down. He was seized with a slight trembling or shivering, which continued nearly five hours.

At six o'clock in the evening, that is, after a period of seven hours, the animal was observed and had no evacuation, neither solid nor liquid. He had remained all this time lying in the same position.

The next day (July 28th), at 8 A.M., the animal appeared quite recovered from the injection: from the depression which at first ensued, he has become sportive and fawning. There was in the kennel only one scanty evacuation, half liquid, half solid, bilious, of recent date.

July 29th. Solid evacuations.

July 31st. The animal has had quite profuse hemorrhage in the night. The wound in the thigh still bleeds easily. No reunion by first intention of the wound, the edges of which are gaping and scarcely swollen.

This experiment repeated several times shows:—

1st. That the sulphate of soda, when injected in the veins, does not purge.

2d. That by the diminution of the coagulability and plasticity which it occasions in the blood, the salt of soda disposes to hemorrhages, and retards the work of cicatrization.

SULPHATE OF MAGNESIA.

EXAMPLE V. September 17, 1868. 15 cubic centimètres of a solution, 20 parts sulphate magnesia to 100 parts water, were injected in the right crural vein of a vigorous dog, weighing 8 kilogrammes. At 2 h. 16 m., during the injection, the animal was restive, its respiration accelerated, then became feeble, and, presently, was carried on by short and abrupt contractions of the diaphragm.

2 h. 22 m. New injection of 15 cubic centimètres of the solution. Complete arrest of respiration. Artificial respiration maintained by means of bellows.

No reflex action of the eyes, upon touching the cornea. No movements of the foot or tail, when pinched severely. The heart beats very regularly.

2 h. 30 m. The left sciatic nerve was galvanized by means of the apparatus of Legendre and Morin: very feeble contraction of the muscles of the member. The muscles under direct excitement contracted well. No reflex movements of the eyes.

2 h. 35 m. Galvanization of the sciatic nerve; no movement of the foot. Muscles excitable; no reflex action; pupils largely dilated.

2 h. 40 m. Spontaneous respiration commenced in the diaphragm; but weak and insufficient.

2 h. 45. Sciatic nerve became slightly excitable. Abdominal respiration stronger and more regular (artificial respiration discontinued.) No reflex action of the eyes or feet, when pinched hard.

2 h. 55 m. Feeble effort to close the eyelids, upon irritation of the cornea.

3 h. Galvanization of the sciatic nerve; decided motion in the foot. Strong and full respiration, which indicated that the animal perceived the uncomfortable sensation, caused by excitement of the nerve.

3 h. 20 m. Voluntary movement of the head and hind feet. Reflex action of the eyes partially returned. Pupils less dilated.

3 h. 30 m. General tremor commenced in the anterior parts, and extended itself to the hind feet, in proportion as motion re-

turned there. It ceased about 4 o'clock: at that time the animal had regained all its movements, but its gait was still feeble and uncertain.

September 18th. Two bilious liquid evacuations in the night.

September 22d. The animal had recovered partially. There was no immediate reunion of the wounds in the neck and thigh; the edges were gaping, and nearly free from tumefaction. On pressure of the wound, a bloody serum exuded.

September 25th. The wounds commenced to suppurate, especially that of the neck, which was in a more advanced state of cicatrization.

Example VI. Frog. 25 centigrammes of a solution, one part sulphate of magnesia to three parts water, was injected in the left iliac artery, at 6 h. 55 m. Injection finished at 7 h. 5 m.

7 h. 15 m. Complete paralysis of voluntary and reflex action, save in the left posterior member, preserved by the ligation of its vessels. Lumbar nerves of the right side not excited by the forceps of Pulvermacher. Muscles excited directly. Regular action of the heart.

The next day, the frog has regained full power of motion.

One fact results from our experiments with the sulphate of magnesia, it is: that injections of this salt in the blood are poisonous. We cannot admit, then, with M. Rabuteau, that the salts of magnesium are as harmless as the salts of sodium. In our experiments with the sulphate of soda, we have injected, always, from 10 to 15 grammes, and sometimes 20 grammes of this salt, without producing death. On the contrary, 2 to 6 grammes of sulphate of magnesia, according to the size of the animals, have invariably sufficed to occasion an almost frightful death.

This first point established, let us seek to ascertain the mode of intimate action of the sulphate of magnesia. In consideration of these facts, only, paralysis of voluntary and reflex action, bordering upon loss of the excitability of the motive nerves, with preservation of the action of the muscles, which follow the introduction of the substance in the blood, among dogs; the same effects, with greater preservation of the sensibility and

movements of the isolated member, among frogs. One cannot refrain from comparing the action of sulphate of magnesia with the characteristic action of curare, and the poisons of the motive nerves. Without doubt, the alteration that the sulphate of magnesia originates in the blood should be taken into consideration; but this alteration would not give an explanation of the phenomena which immediately follow the injection. The diminution of the coagulability and plasticity of the blood can only, as with sulphate of soda, account for the later phenomena, that is, the consecutive hemorrhages and delay occasioned in the cicatrization of the wounds.

Experiment V. shows, finally, that if the sulphate of magnesia injected in the blood sometimes produces liquid and bilious evacuations, properly speaking, it does not purge, as when given in the intestine.*

In the course of experiments made in April, 1867, to study the toxical action of different metalic salts, I introduced a very small quantity of crystallized sulphate of magnesia under the skin of a frog's back. The animal became gradually enfeebled: at the end of an hour, there was no movement, either spontaneous or reflex, in the different parts of the body. It was the same when sulphate of potass was introduced, hypodermically; but sulphate of soda had no analogous effect. The chlorhydrate of ammonia, on the contrary, occasions, also, an abolition of spontaneous and reflex action, excepting that of the heart, but after having produced a more or less transient tetanic condition. In many cases, the effects of these salts have been dissipated completely at the expiration of a few hours.—[A. VULPIAN.

*Since this article was sent to the press, we have learned that M. Rabuteau and M. A. Moreau have each arrived at the same result as ourselves, relative to the non-carthartic action of sulphate of soda injected in the blood.

Correspondence.

KNOXVILLE, TENNESSEE, *April 21, 1869.*

PROFESSOR DAVIS:—The weather since last fall has been mild. Only during the month of December was it cold, as that term is used in this latitude. At one time the mercury went down to 5° above zero, and a little snow fell. At no time during the whole winter has the ground been covered with snow.

There was no sickness worth mentioning, till, in January, when measles began to prevail. In February, the disease became epidemic; and whole families were prostrated at one time. Most cases were of a simple type, during the month of February, but, in March, was observed, in many cases, a tendency to bronchial and pneumonic complications, with sore-throat and a continued type of fever. Intestinal worms, in a few cases, figured quite prominently, in connection with measles. I may say in this connection, that children are more affected by worms here than I had found to be true in Michigan or Illinois.

February 21st, I was called to see a boy of 14; light complexion and hair.

Besides finding the usual indications of measles, ascertained that for some months previous he would scream at night, and get up in a condition of somnambulism, at times uncontrolable. The tongue was covered towards the base with a thick, creamy coat, but red and pointed at the tip. Although the indications of measles were plain, still, I diagnosed worms to be an immediate cause of the noisy demonstrations during sleep. ℞ Prescribed hyd. cum. creta, gr. x.; pulv. Doveri, gr. xij.; santonin, gr. viij.; M. F. pulv. No. 4, sig., one every three hours, to be followed with castor oil and oil turpentine.

Calling next morning, found that a great number of worms (lumbricales) had been voided from the rectum, besides vomiting some, and even two or three had crawled from his mouth while asleep. To take pulv. Doveri, P. R. N.

23d.: *10 A.M.* Found eruption fully developed upon the face and neck, and the usual catarrhal symptoms. Ordered

teaspoonful doses every four hours, of the following mixture:—

℞. Spts. Nit. Dulc, ---------- ℥j.
Syr. Ipecac, } āā. ---------- ℥iij.
" Scilla, }
Tr. Sang. Canad. ---------- ℥ij.

This boy continued to void worms for some days; and the wild demonstrations gradually ceased to occur. Convalescence seemed established, but, March 11th, he was attacked with pleuro-pneumonia upon the right side. Expectorants and blistering were resorted to, and in a week or more he was about again.

March 2d. Called to attend a boy of 13, laboring under the usual prodromic signs of measles. From some of the symptoms, suspected worms; and, accordingly, gave santonin, with hyd. cum. creta; with the effect to bring some eight or ten away. The eruption came out in due time; and he recovered without any complications.

One case occurred, superadded to common, continued fever. A little girl of 7, with light skin and flaxen hair, was taken, March 8th, with a convulsion. Was called immediately, and found that the fit had subsided; but reaction was coming up rapidly. The child had complained of slight indisposition for two or three days; tongue coated; skin dry; and urine high colored. The fever continued steadily from day to day, when, on Friday, the 12th, the eruption of measles came out finally. The usual catarrhal symptoms were present, but not severe. The fever progressed steadily through the month; the pulse running as high as 140 in a minute, with hot skin, scanty and very high colored urine; tympanitic abdomen about the 21st day, with profuse and very offensive stools. The tongue was very red and clean; appetite wanting; emaciation and extreme debility. The treatment was mainly expectant, the indications from day to day suggesting the remedies.

To-day, April 7th, she is improving finely.

April 14th. Was called to see a child of a year old, that had just recovered from a mild form of measles, laboring under capillary bronchitis. The secretion was so copious as to almost

produce suffocation; the difficulty of expectoration being enhanced by the very ropy mucus. By the use of small doses of hyd. cum. creta and pulv. Doveri, alternated with syr. ipecac and tr. ginger, continued two days, the mucus became more liquid, the discharges from the bowels very copious, and all the suffocation symptoms relieved. The tendency to such relapses seems to be caused by an excess of fibrin in the blood, which is obviated at once by the use of mercury and other antiphlogistic remedies. The difference between this locality and that of the valley of the Mississippi is very noticeable, especially to one who had for many years observed diseases in no other region of country.

The air upon this elevated range is always pure, and the depressing effects of miasma wholly unknown. Convalescence from attacks of disease seems to be rapid, and health soon restored. Relapses are more uncommon, from the fact that the *vis medicatrix naturæ* has less to contend with.

I will conclude by giving the following description of cases coming under my observation:—

BELL'S PARALYSIS.

March 23d, 1869. A man called at my office laboring under facial paralysis. The left eye was wide open, and could not be closed. On winking the right eye, the left remained unmoved.

He could neither blow, whistle, nor spit. In the act of laughing, the left side of the face was not moved, giving quite a ludicrous appearance.

On opening the mouth, his features were awry. On examining the throat, the arch formed by the pillars of the fauces was larger on the affected side, the uvula inclining to the sound side. Articulation somewhat deficient. The eyeball perfect in its movements. Slight difficulty in mastication, with an inability to move the morsel from the left cheek. Slight deafness in the left ear.

The affection was first noticed after riding in a railroad car, with the left cheek exposed to a current of air from an open window. I have had no opportunity as yet of attempting a cure.

HERNIA OF UNUSUAL SIZE.

Charlotte Freeman, mulatto, *æt.*, about 35, lived with her master in S.W. Virginia till the fall of 1863, when she came to this place. Last summer she consulted me in reference to a "rupture." I found an immense left inguinal hernia, reducible, but not capable of being kept up, by reason of the size of the sac. Advised the use of a suspensory apparatus; and saw no more of her till a few days ago. I was called to prescribe for her child, and took occasion to obtain a history of the case.

At about the age of 20, she first noticed a tumor in the left groin, about as large as a hen's egg. Her master procured a truss, which enabled her to keep about without any trouble. When it was worn out, her master refused to get another; and soon it began to enlarge. When the war commenced, she says it was about as large as a "pint bowl."

During the war, a kick from a mule at one time, and from a cow, while milking, at another, made her much worse.

She says, the last mentioned accident brought it to the present size, some idea of which will be conveyed by the following measurements:—

Circumference at the largest point 20 inches. From the upper margin of the ring around the tumor, longitudinally, to the opposite side or edge of the ring, 24 inches. The most dependent point of the tumor is four inches above the patella; and the woman is fully the average in height. The tumor is egg-shaped, with the larger end downwards.

On lying down, the whole contents of the tumor will readily return to the abdominal cavity, except what appears to be a portion of omentum adherent to the sac, anteriorly. This portion causes an appearance of bulging, and it looks as though one or more of the internal coats of the sac had been ruptured. This was caused, she says, at the time of receiving the blow from the cow. When the intestinal contents of the sac are within the abdomen, the hypertrophied integuments and this supposed omental adhesion make a mass as large, nearly, as a cocoanut. This prevents a truss being worn; and there is no way for the poor woman to do when in the erect position but to

let the whole hernial mass *swing*. She goes about and labors hard, with but little apparent inconvenience. Both rings seem merged into one large opening about two inches across.

She has had nine children, four of them since the tumor attained its present size.

F. K. BAILEY, M.D.

Proceedings of Societies.

ALUMNI ASSOCIATION.

Minutes of the annual meeting of the Alumni Association of Chicago Medical College:—

The members of the Alumni Association of Chicago Medical College met in the lower lecture room of the College at 7½ P.M., March 22, 1869.

The President, Dr. H. P. Merriman, occupied the chair.

The attendance was larger than expected.

Minutes of previous meeting read and approved.

Some amendments were made to the Constitution and By-Laws.

Interesting papers were read from Drs. Herbert Harris, D. A. Sheffield, J. F. Kelsey, A. C. Corr, G. Wheeler Jones, Stacy Hemmenway, and others.

The President's address was then listened to with deep interest by all; a copy of which, on motion, was requested to be furnished for publication in the *Chicago Medical Examiner*.

The following are the officers elected for the ensuing year:—

President, J. S. Sherman, M.D., Chicago.

1st Vice-President, J. G. Fredighe, M.D., Chicago.

2d Vice-President, G. H. Fuller, M.D., class '69.

Secretary and Treasurer, S. A. McWilliams, M.D., Chicago.

The Alumni were then notified of the Treasurer's willingness to receive their annual dues.

No farther business appearing, the meeting adjourned.

At a subsequent meeting, the Association voted fifty dollars

for a prize to that member of the Association who should present the best essay on some medical or surgical topic. Dr. N. S. Davis offers to increase the sum to one hundred dollars. The subject of the essay to be left to the option of the competitor. All are members who have paid their yearly dues of one dollar. Any Alumnus not now a member can become one by sending his name and one dollar to the Secretary, which it is hoped every one will do.

The Committee on competing essays consist of N. S. Davis, M.D.; E. Andrews, M.D.; H. A. Johnson, M.D.; and W. Hay, M.D. Each essay must be designated by a device or motto, and must be accompanied by a sealed envelope bearing the same device or motto, and containing the name and address of the author. The envelope belonging to the successful essay will be opened and the name of the author announced at the next annual meeting of the Association, also, at the next annual commencement of the College in 1870. The competing essays must be sent in to the Secretary of the Association on or before the 15th February, 1870. It is expected that the prize essay and others of marked value will be published in pamphlet form and furnished to the members of the Association.

S. A. McWILLIAMS, *Secretary and Treasurer,*
166 State St.

CHICAGO MEDICAL SOCIETY.

FRIDAY EVENING, March 5, 1869.

The Society was called to order, and in the absence of President Marguerat, Dr. W. Kersham was appointed to fill the chair *pro tem.*

The Secretary read the minutes of last meeting, which were duly approved.

Drs. Groesbeck and Wickersham recommended Dr. J. R. Groesbeck for membership. Referred to Board of Censors.

The Board of Censors reported favorably in the case of Dr. Lyman Ware. Society proceeded to ballot, Dr. Ware being unanimously elected a member of the Society.

Dr. Paoli asked permission to read a letter from a member of the Legislature in relation to the Medical Bill, to the effect that the bill would not pass this session for want of time, as it had at that time not been reported on.

Dr. Groesbeck remarked that he was sorry the Society had taken any action to promote the passage of the bill, and hoped they would cease all further action in the matter.

Under call for report of cases, Dr. Paoli reported case of a lady on Erie St., who supposed herself suffering from inflammation of the bowels. Dr. found no inflammation, but retroversion of the uterus. The woman had some accident five years ago. Lately she has suffered a great deal from leucorrhœa, which the Doctor thinks is the great cause of the retroversion. Under the use of tonics, iron, etc., the patient is doing well.

Dr. Paoli asked of the Society what diseases were most prevalent in the city.

Dr. Davis reported the cases of two girls, aged respectively 10 and 15 years, who had suffered from scarlatina in a mild form. In one week, the youngest complained of pain in the back. There was general anasarca, continuing four days. Urine scanty and high colored. She took bitartrate, nitrate, and acetate of potassa and digatalis. Notwithstanding only one passage of urine was effected for 24 hours, which was half blood. This was soon followed by symptoms of giddiness, dilatation of the pupils, and quick, successive convulsions, continuing for 18 hours.

Everything taken into the stomach was rejected. Bromide and iodide of potassium was given without effect, together with vapor baths aud fomentations. Still convulsions continued. I ordered nitrate of potassa and calomel, each 5 grs., to be given every hour until two doses were taken, then the interval lengthened to every two hours, alternated with a mixture of chloroform and tinct. cannabis Indica. Four powders were given before the bowels were moved, evacuation being copious. Then withdrew the calomel and gave nitrate potassa and pulv. Doveri āā gr. ij., every four hours, continuing the chloroform and cannabis Indica. Child is now well.

In the other case, the girl of 15 years, I could get nothing to act on the bowels until I finally prescribed three gtts. oleum tiglii, part of which was rejected. It, however, produced a copious evacuation, which relieved her. For one week she seemed quite well, when she was again seized with violent convulsions, which continued for 24 hours. Dr. Byford saw her and ordered a vapor bath and some other remedies. It is now one week since she has had a convulsion. These are the only cases of scarlet fever that have been followed by anasarca and convulsions that I have met with for a considerable period of time. As regards the prevalence of disease, the Doctor stated that there is a great deal of pertussis, but not sufficient scarlet fever to be called an epidemic. Has noticed some cases, however, which assumed a diphtheritic form.

Dr. Groesbeck reported fatal cases of scarlet fever, the first a little boy of 3½ years. At an early stage of the disease there appeared on both tonsils white patches which extended to the mouth. The patches, however, soon cleared off, and I looked for convalescence. After one week had elapsed, the tonsils began to swell, and in due time I opened one tonsil, considerable pus escaping. In a day or two later there was severe hemorrhage from the sloughing surface of the tonsil, and the child died.

The other case, a boy of 4½ years, was taken with the same symptoms, the same exudation appearing on the tonsils and in the mouth. When convalescence was expected in this case they became swollen and edema of the lungs supervened.

Dr. Paoli thinks that when you find blood present in the urine in acute Bright's disease following scarlatina, that it is a favorable symptom. The Doctor wished to know if any member had used cannibis Indica alone as an antispasmodic.

Dr. Davis says there was no effects of antispasmodics in the cases referred to until after free elimination had been produced, but thinks the cannibis Indica would have acted favorably alone.

Dr. Davis says he saw Dr. A. A. Dunn four days before his death, and that Dr. Andrews had seen him several days previ-

ously, as he was attending him. Says that Dr. Dunn seemed to think he was suffering from neuralgia in the cicatris, on his forehead, although the pain was somewhat diffused. The Doctor seemed wearied and tired, and had been taking morphine and quinine while going about. Nearly a week before his death, he said he felt as though his end was coming. I visited patient that day. He grew rapidly worse. Pulse not accelerated. Very moderate increased heat of head. Went steadily, although quite rapidly, into a dull, drowsy condition, but if roused would talk. Pupils a little dilated. When I was again called I could not rouse him sufficient to converse, although he seemed to recognize me. Pulse soft and compressible. Pupils contracted and but little affected by light. Bowels inactive. Gave an enema. Red and congested condition of the nases and fauces, but throat was not swollen. He continued to sink into a stupor, and the third day after I saw him he died. There is no doubt in my mind but what there was disease of the anterior lobes of the brain, as we could not get him to swallow, the second day after I saw him. At the time of death there seemed to be edematous infiltration about the glottis. Dr. Davis also spoke highly of the deceased, and recommended that a committee of three be appointed to adopt resolutions and send a copy to the family of the deceased and copies to the city papers.

Dr. Fitch said that he has been acquainted with Dr. Dunn for twenty years, and all that Dr. Davis has said is true. Remarked that the Doctor did not serve in the army as a surgeon but as a Captain in the line. During the service he received a shell wound of the forehead, which continued to discharge for two years and only healed about one year ago. Dr. F. was also inclined to think the wound was the predisposing cause of his sickness, as there was a fracture of the cranium.

Dr. Holmes said Dr. Dunn gave a long report of his own case to the Society some time ago, and stated that spicula of bone had been discharged from the nostril.

Dr. Fitch said that he thought Dr. Dunn had seemed depressed and dull ever since he received the wound, not appearing like the same man to him.

On motion, a committee was appointed, consisting of Drs. Davis, Fitch and Groesbeck, to report resolutions in the case of Dr. Dunn at the next meeting of the Society.

After transaction of some miscellaneous business the Society adjourned.

CHICAGO, FRIDAY EVENING, March 12, 1869.

Society was called to order, President Marguerat in the chair.

Secretary Macdonald read the minutes of last meeting, which were duly approved.

Board of Censors reported favorably in the case of Dr. J. R. Groesbeck. Society proceeded to ballot, Dr Groesbeck being unanimously elected a member of the Society.

The Secretary read the resignation of Dr. J. E. Ray, which after some discussion was duly accepted by the Society.

Then proceeded to the discussion of the "Hypodermic Application of Medicinal Substances."

The discussion was opened by Dr. Ingalls, who gave an interesting history concerning its discovery. Dr. Wood, of Scotland, in 1850, introduced this method of applying medicines, but it has been proven that Dr. Brainard, of Chicago, used a syringe constructed on the same principle, and manufactured for him by Tieman, as early as 1845, and used it in the treatment of spina bifida, hydrocephalus, ascites, etc., and that he wrote several articles on the subject about that time. Hence we can justly say that the system of the hypodermic application of medicines originated in Chicago. The Doctor also considered the different complaints in which it was most applicable.

Dr. Marguerat said that he was glad to hear Chicago had a claim to such a valuable discovery, but did not think it would supercede the administration of drugs by the old way. Says he noticed a case of death from erysipelas, following a large injection of quinine, but thinks there is no doubt but what it is of great service in the treatment of neuralgia, dysmenorrhœa, etc., and believes its effects more permanent than when otherwise administered. Said he was called in the case of a woman who was suffering from hysterical insanity, the result of ill

treatment by her husband. She had been a raving maniac for three weeks; could not give her medicine, as it took three or four to hold her in bed. He injected morphine, and in five minutes the patient passed into a quiet sleep.

Dr. Paoli remarked that he had no doubt but what the time will come when the hypodermic application of medicine will be approved by the profession generally. In cholera time, said he derived more benefit from the administration of morphine in this way than by any other. Has had no experience with other alkaloids.

Dr. Foster asked what proportion of morphine was most applicable for hypodermic action.

Dr. Fitch said he had but little experience in this mode of treatment, except as recommended by Dr. Brainard in the treatment of varicose veins and hydrocele. Generally introduces 15 or 20 drops of the liquid, first pinching up a fold of the skin before inserting the point of the instrument. Says Dr. Anstie, in *Braithwaite's Retrospect*, considers atropine of great value when the disease is located in the pelvis or abdomen, and strychnia in gastralgia. Dr. F. reported a case of abortion which occurred two months ago, when the patient was in great pain, restless and uneasy, and could take no food. Gave $\frac{1}{75}$ gr. atropine with great success; after second dose was introduced there was dilatation of the pupil.

Dr. Davis remarked that he had not much experience in the use of the hypodermic injection. Used it in one case of facial neuralgia with permanent benefit. Patient has had no attack for a year. Used it in several other cases with temporary benefit. Thinks when the solution contains too much acid then it is apt to be followed by ulceration or abcess.

Dr. Ingalls thinks that what Dr. Davis has said is true, and is of the opinion that all acids should be discarded from injections, always using distilled water. (Magendie's solution morph. gr. xvj.; aqua ℥j.)

Dr. Bogue thinks there is great benefit from the addition of from 1-40 to 1-80 of a gr. of atropine to about a-half of a dose of morphine, as it extends the effects of the anodyne from 12

to 16 hours. Thinks this method very useful given in the cramps of cholera.

Society passed to miscellaneous business.

The committee appointed to report resolutions in the case of Dr. Dunn submitted the following, which was duly accepted by the Society:—(See Resolutions in April number.)

Society adjourned.

FRIDAY EVENING, April 16th, 1869.

Society called to order by the President, Dr. R. G. Bogue.

Reports of cases being the order of the evening, Dr. N. T. Quales reported the following interesting case of rupture of uterus:—

March 9th, 1869, at two o'clock P.M., I was called to tend Mrs. L., a strong, healthy Irishwoman, aged 28, in her third confinement—two previous having been instrumental deliveries—told me she had been sick since five o'clock in the morning; pains having been strong and regular; membranes ruptured half an hour before my arrival, and about 15 or 20 minutes later (the pains having continued with increased severity) she felt something "give way," and the pains almost instantly ceased.

On examination, I found the os uteri fully dilated, the cord down, but no parts presenting. By introducing the hand, I found the promantory of the sacrum unusually prominent, and by carrying the hand farther, it came in contact with the umbilicus, and I made out the position as transverse, the abdomen presenting—the head to the right, and the feet to the left, side of the mother. In passing my hand (right) round in order to get hold of the feet, I found a longitudinal rupture of the posterior wall of the uterus, above the promontory of the sacrum, about $2\frac{1}{2}$—3 inches in length, with intestines protruding. My feelings at this discovery can better be imagined than described. I despatched a messenger for my friend Dr. Paoli.

With the conviction that immediate action offered her the best chance, I decided to turn and deliver at once. I brought down the left foot, and, by gentle traction, succeeded in delivering her, in course of 15 or 20 minutes, of a fullborn, healthy

male child—apparently stillborn, yet, after some patient effort, I had the satisfaction of seeing vitality restored.

By gentle traction on the cord, the placenta was expelled in about three inches. There was now some considerable flooding. I at once gave ℥ij. of the fl. extract of ergot (Duffield's), introduced my hand and replaced the protruding intestines, and, by friction and pressure over the abdomen, caused firm contraction of the uterus before I withdrew my hand. In course of 15 minutes, I repeated the ergot, in order to obtain continued contraction; and having succeeded in this, I applied a moderately tight bind and napkin to the ulva—waited another half hour—the contraction of the uterus continued. I gave gr. ij. of opium, and left orders to call me if anything unusual should occur. At eight o'clock in the evening, I called and found the uterus somewhat dilated, the patient otherwise comfortable. Ordered gr. ij. of opium at once, and to be followed with gr. j. doses of opium every two or three hours, if she was awake.

March 10th, at eight o'clock A.M., I found her feverish and uneasy. She had slept about three hours during the night, and passed urine twice. Pulse 112 per minute; respiration somewhat labored; tongue dry; considerable tympanites and tenderness about the uterine region; lochial discharges suppressed. Ordered tinct. verat. vird., gtt. 4, every three hours, and pulvis opium and dydrorg. submureas, of each, gr. j., every two hours, with turpentine stupes over the abdomen: saw her at noon, when she was more comfortable. At eight o'clock in the evening, the pulse was 108 per minute; the tenderness about the abdomen subsided. Ordered gr. ij. of opium, at bedtime.

March 11th, at eight o'clock A.M., pulse 106 per minute; no great pain; had slept several hours during the night, and taken some nourishmeut. Treatment continued, with longer intervals between the doses. Also, injection into the uterus of solution of acid carbol., gtt. vj. to the ℥j. of warm water, three times a day.

March 12th. Symptoms much aggravated; pulse 120 per

minute; tongue dry; lympanites and tenderness increased; had passed a restless night. Ordered blister, 12×12, over the abdomen, to be left on for six hours. Internally, I ordered quinia sulph., gr. j.; pulvis opium, gr. ss., every four hours, to alternate with tinct ferrsh, gtt. xx. On removing the blister, a large, warm flax-seed poultice was applied to the abdomen, and a full anodyne at night.

March 13th. Much improved; little pain besides the soreness from the blister; lympanites greatly subsided; pulse 112 per minute; tongue moist; bowels moved for the first time since confinement; locheal discharges reestablished; took considerable nourishment during the day.

March 14th. Improving; pulse 90 per minute; tongue moist; no pains, and but little lympanites: treatment continued.

March 27th. Sits up, and can walk across the floor. Secretion of milk liberal.

At the present writing, April 14th, 1869, both mother and child are doing well; the mother performs her ordinary household duties, yet complains of occasional soreness over the abdomen.

Dr. G. C. Paoli, in remarking on the foregoing case, gave the following statistics of ruptures of the uterus:—

In the Kingdom of Wurtenburg, in 219,535 births was observed six ruptures of the uterus, being only one in 36,539. Madam La Chapel observed in Paris Hospital only one in 20,000 births.

Professor Jocery Elipse observed two ruptures in 20,056.

Dr. Erringman, of Prague, from 1827 to 1833, observed seven ruptures in 18,085 cases.

Dr. Cedershold, of Sweden, from 1830 to 1831, observed two ruptures in 2334. Churchill, of England, in 42,768 there was 75 cases, making 1 in every 657 which occurred in Dublin.

Verbal reports of cases were made by Drs. Groesbeck, Paoli, Mitchell, and others.

Dr. T. D. Fitch, one of the surgeons to the Cook County Hospital, reported a case of death from the inhalation of chloroform, which occurred that day at the Hospital.

The patient was an adult, native of Sweden, and a laborer. Several months since he suffered a severe injury of his foot and ankle, by a waggon-wheel passing over it. The injury had resulted in extensive destruction of soft parts by suppuration, and caries of the bones of the ankle.

He was admitted to the Hospital only a few days since; and a consultation of the surgeons of the institution resulted in the decision that amputation was necessary. The patient had been kept on good diet and tonics during the short time he had been in the Hospital, and had taken a glass of wine immediately before entering the operating room. No disease had been detected in the organs of respiration or circulation; and the patient was himself anxious to have the operation performed. The chloroform was administered on a napkin, held over the nose and mouth, not so close as to prevent the free access of atmospheric air.

When the inhalation had progressed from one to two minutes, and ten or twelve inspirations had been taken, an unusual sound was noticed, and the napkin immediately removed. A slight tremor of rigidity or spasm passed over the muscular system; three or four slight efforts at inspiration took place at long intervals, and then ceased entirely with complete muscular relaxation. The heart, however, continued to beat feebly for more than half an hour after the respiration ceased. The most strenuous efforts were made to revive the patient by artificial respiration, and otherwise, for more than one hour. The account of Dr. Fitch was corroborated by Drs. Bevan and Bogue, who were present and assisted in the efforts to restore the patient.

A minute and careful *post mortem* was made the following day, but no disease of the organs of circulation or respiration were found, and no congestion or even fulness of the vessels of the brain.

After the transaction of some miscellaneous business the Society adjourned.

Book Notices.

A Practical Treatise on the Diseases of Women. By T. Gaillard Thomas, M.D., Professor of Obstetrics and Diseases of Women and Children, in the College of Physicians and Surgeons, New York; Physician to the Bellvue Hospital; etc., etc., etc. With 225 Illustrations. Second Edition, revised and improved. Philadelphia: Henry C. Lea. 1869. 627 pages. For sale by S. C. Griggs & Co.

It is but a few months since we noticed and commended to our readers the first edition of this work. This edition is published in excellent style, and has been carefully revised by the author. It is an excellent practical treatise on the diseases of the non-pregnant female.

Editorial.

Explanation.—On the 28th of April, when we left home to attend the meeting of the American Medical Association, the present number of the Examiner was so far printed, and the matter all furnished for its completion, that we supposed it would be sent to the subscribers promptly, as usual, during the first week in the month. Returning on the 15th of May, we were much surprised to find it still in the printer's hands. The delay had been occasioned solely by some misunderstanding in relation to the cuts with which the number is illustrated.

Homœopathy.—We have received a pamphlet of 100 pages, embracing four lectures on this subject, by A. B. Palmer, A.M., M.D., Professor of Pathology, Practice of Medicine, etc., in the Medical Department of the University of Michigan. These lectures embrace a very interesting and valuable exposition of the doctrines of homœopathy, as it was and is, and would be very useful for reference in the library of the physician, or even for general circulation among the people. Copies may be had at S. C. Griggs & Co., of this city. Price, 30c.

Illinois State Medical Society.—We are informed by the Committee of Arrangements that the members of the Illinois State Medical Society will commence in the Common Council Room, in the City Hall building, at 10 o'clock A.M., of Tuesday, May 18th, 1869. This is an excellent and convenient place in which to meet, and every arrangement will be made to promote the interests of the Society.

Correspondence.—Just after the last pages of our April number had gone to press, we received, in the form of advanced sheets, a copy of very interesting letters, written by Wm. O. Baldwin, M.D., President of the American Medical Association, and by G. C. Nott, M.D., formerly of South Carolina. The letters were written in excellent spirit, but related to matters bearing on the meeting of the Association this Spring, and, hence, could be of little use at this date.

Chicago Medical Society.—At the recent annual meeting of this Society, the following officers were elected, and committees appointed for the ensuing year:—*President*, R. G. Bogue; *Vice-President*, Ernst Smidt; *Secretary and Treasurer*, Hiram Wanzer. *Sanitary Committee*, Drs. Quales, Fenn, and Hutchinson. *Censors*, Drs. Fitch, McDonnell, and Holmes. *Committee on Ethics*, Drs. Davis, Trimble, and Margueret. *Committee on Microscopy*, Drs. Mitchell, H. M. Lyman, and Danforth. *Committee on Questions for Discussion*, Drs. Paoli, Hildreth, and Adolphus.

Adams County Medical Society.—The Adams County Medical Society, at its November meeting, adopted a revised Fee Bill, together with the following:—

In cases where consultations have been had, or where two or more physicians have been in attendance, the physician having the case in charge shall embody in his bill the fees of the counsel or assistants, and account therefor to the same, paying the full amount or such proportion of the whole bill as may be collected.

I. *Resolved*, That the foregoing table of fees be adopted as the Fee Bill of this Society.

II. *Resolved*, That the virtuous and industrious poor shall be attended by the members of this Society as cheerfully as the rich, and for such compensation as they are able to make.

III. *Resolved*, That every member of this Society shall keep a record of all patrons who are able, but who neglect or refuse to pay for medical services, and report the name and residence of the same at every meeting; and that all such persons be afterwards required, by all the members, to pay for services in advance.

IV. *Resolved*, That our fees are due as soon as the services are rendered, and that all members of the Society shall make prompt collections, and give the community to understand that we are entitled to the same consideration in this respect that is claimed by merchants, artisans, and laborers.

V. *Resolved*, That this Fee Bill, and these Resolutions, with the names of all the members of the Society appended thereto, be printed in a suitable form, and that every member be required to have a copy of the same conspicuously placed in his office, that our patrons may be fully apprised of its contents and conditions.

VI. *Resolved*, That members who disregard this Fee Bill and these Resolutions shall be liable to the same penalties that are attached to a violation of the Code of Ethics.

Money Receipts to April 26.—Drs. J. F. Kelsey, $3; D. A Sheffield, 3; S. J. Starr, 1; Daniel Gard, 3; John D. Wood, 3; D. S. Jenks, 3; Wm. Dougall, 3; A. G. Jones, 3; D. LaCount, 1.50; Harrison Rodbaugh, 3; J. B. Cloud, 3; R. Winton, 3; V. L. Hurlburt, 3; Theodore Hoffman, 3; Jessie H. Foster, 3; W. M. Chambers, 3; C. S. Hamilton, 3; J. H. Reynolds, 3; L. Brookhart, 3; Murphy and Wharton, 6.

The Discovery of a Minute Fossil Horse.—Professor Marsh, of Yale College, has discovered in the tertiary deposits of Nebraska, the minutest fossil horse yet obtained. It is only two feet high, although full grown. This makes the seventeenth species of fossil horse discovered on this continent.—*Boston Medical and Surgical Journal.*

MORTALITY FOR THE MONTH OF MARCH, 1869:—

The sanitary superintendent submitted the following report of mortality for the month of March, 1869:—

The number of deaths during the month of March was 353, with 41 premature and still births.

COMPARISON.

Deaths in March, 1869,	353	Deaths in March, 1868,	380	Decrease,	27
Deaths in Feb., 1869,	382	Decrease,			20
Males,	207	Females,	146	Total,	353
Single,	267	Married	86	Total,	353
White,	349	Colored,	4	Total,	353

NATIVITIES.

Bohemia,	3	France,	3	Switzerland,	2
Canada,	8	Germany,	33	Sweden,	8
Native Chicago,	76	Holland,	2	Scotland,	3
Foreign "	95	Ireland,	37	Unknown,	2
U. S., other parts,	70	Italy,	1		
England,	5	Norway,	5	Total,	353

MORTALITY BY WARDS FOR THE MONTH.

Ward.	Mortality.	Pop. in 1868.	One death in	Ward.	Mortality.	Pop. in 1868.	One death in
1	6	9,094	2,273½	14	24	14,839	742
2	12	13,074	769	15	28	21,078	958 1-10
3	22	15,076	793½	16	21	15,465	736 3-7
4	18	17,796	936	County hos.	13		
5	19	16,033	943⅛	Accidents,	11		
6	18	13,083	769 1-10	Mercy Hosp.	5		
7	28	25,492	772½	Suicides,	1		
8	14	15,813	790 4-7	St. Jo. Orph. Asylum	1		
9	27	19,297	689⅛	Poisoning,	9		
10	20	12,925	1,435 7-9	Marine hosp.	1	Woman's home,	1
11	17	14,340	1,024 1-5	Home for the Friendless,	2	Hosp. for Women & Children,	1
12	24	17,485	603				
13	15	11,164	507½				
Total,					374		

REPORT OF SANITARY SUPERINTENDENT.

The sanitary superintendent also submitted his yearly report, of which the following is a brief synopsis:

The total number of deaths was 5,807. The sexes were, males, 3,191; females, 2,616. The condition was, married, 1,222; single, 4,585. Color, white, 5,742; colored, 65. In the way of nativities, Chicago suffers to the extent of 3,144. The greatest number of foreigners were from Germany, 671; the next greatest number, 510, being natives of Ireland. The mortality by wards shows the largest number to have been in the Seventh Ward, and the smallest in the First Ward. The total number of births was about 8,000. The number of females born during the year was much less than males.

At the last annual meeting of the Medical Society of the State of New York, Dr. March read a paper entitled "Spontaneous Lithotomy" giving an account of a case in which a large-sized vesical calculus was discharged through an ulceration in the perinæum.—*Medical Record.*

A Singular Disease.—Before the London Obstetrical Society, Mr. Heckford recently exhibited the generative organs of a child aged ten months, in which the vagina was enormously dilated, and occupied by villous growths of a medullary character. The rectum, bladder, and urethra were normal. The os uteri opened into the upper wall of the vaginal sac. The disease had lasted for about four months; and the child died shortly after its admission into the East London Children's Hospital.—*Medical Record.*

The Half-Yearly Compendium.—The number of this periodical for January has now appeared. It is full of the choicest selections on all branches of medical science, and should be in the hands of every physician. No synopsis of professional works, or articles, at all compare with it, either in the diversity of sources consulted, or the number of valuable facts accumulated.

The annoying delay in the publication of this number will be avoided in future. The next number may be confidently looked for by July 10th.—*Med. and Surg. Reporter.*

A Valuable Collection for Sale.—A large and superior collection of original illustrations, by the late Prof. Türck, of Vienna, comprising 777 water-color paintings of life size, and illustrating the diseases of the larynx and pharynx, as seen with the laryngoscope or from pathological specimens, is for sale by the family of the Professor. The paintings were executed by Drs. Elfinger and Heitzmann in the first style of the art. A history of each case is annexed. Will not some member of the profession so far render himself a benefactor of his brethren as to purchase the collection, that we may have it among us. F. H. B.—*Boston Med. and Surg. Journal.*

Catarrhus Vesicæ.—This disagreeable chronic complaint is often very obstinate; it may therefore, be stated that M. Mallez has found the following solution injected into the bladder very efficacious: Water ten ounces; tincture of iodine, forty-five drops; iodide of pottassium, fifteen grains. When the

pain is very annoying, add fifteen grains of the extract of belladonna to the above. He has also employed carbolic acid, nitrate of silver, and hyposulphite of soda with advantage.—*Lancet, Jan. 2, 1869.—Medical News and Library.*

A Superior Liquid Glue.—A liquid glue, far superior to mucilage, may be made by dissolving glue in an equal quantity of strong hot vinegar, adding a fourth of alcohol and a little alum. This will keep any length of time when placed in closed bottles, and will glue together horn, wood, and mother of pearl. —*Scientific American.*

Diabetes Cured by Peroxide of Hydrogen.—Mr. J. J. Bayfield (*British Medical Journal*) reports a case of diabetes cured by peroxide of hydrogen. He commenced with half-drachm doses of the ethereal essence of the peroxide, and gradually increased it to three drachms a day.—*The Med. Record.*

A Surgical Prize.—The Surgical Society of Paris has just announced the subject of the Laborie prize (£48), to be awarded in January, 1870:—"Point out, by the aid of clinical facts, the actual value of supramalleolar amputation from the following points of view:—1. The mortality consequent upon the operation. 2. On the different ways of performing it. 3. The usefulness of stumps in the act of walking. 4. The artificial limbs best calculated for these stumps."—*Med. Record.*

Treatment of Diseased Gums.—A writer in the *London Lancet* recommends the following treatment of diseased gums: —The teeth should be washed night and morning with a moderately small and soft brush; after the morning ablution, pour on a second toothbrush, slightly damped, a little of the following lotion, and apply it to the affected parts:—Carbolic acid, one scruple; rectified spirits of wine, two drachms; distilled water, six ounces. By the use of this preparation, suppurative action is kept under, and the gums get firmer and less tender. —*The Medical Record.*

The Last Wonder of the Spectroscope.—The spectroscope, which, since its invention eight years since, by Bunsen and Kirchoff, has contributed so much to the progress of science, was used with signal success in observations of the recent total eclipse of the sun, by English and French parties, in different parts of Asia. By this means, the nature of the protub-

crances on the rim of the solar disc, observed in former eclipses, has been satisfactorily explained. They are found to be columns of incandescent gas, possibly containing hydrogen.—*The Medical Record.*

Calcification of Tooth Pulp.—Recently Miss L., aged 21, of nervous, sanguine temperament and general good health, called for consultation in reference to her two superior central incisors. About four years before, they had received a blow which partially loosened them; they were quite sore and painful for a few weeks, and then recovered so far as to be used with a tolerable degree of comfort. The left tooth soon changed somewhat in color; and the presumption was that the pulps of both were devitalized. Two years and a half after the accident, the teeth began to change position, the cutting edges being thrown forward against the upper lip, disfiguring the mouth very much.

In consequence of this, together with constant soreness, which had existed for several months, it was decided to remove them, which being done nothing particular was observable, further than had been shown before extraction, the left tooth showing some change of color, but the right, none from that of a healthy tooth.

Through inadvertence, the crown of the latter, a day or two after extraction, was broken into three or four pieces, breaking off at the neck of the tooth; the pulp was found to be completely calcified, entirely filling the pulp chamber; it did not break; the fragments of the crown parted from it, leaving it standing perfect, tightly imbedded in the canal of the root so firmly that it can not be drawn out with the fingers. This is the only case of the kind we have ever seen, and is a very marked illustration of a process upon which very little attention has been bestowed, and about which not much is known.

We were recently presented by Dr. Cushing, of Chicago, with a section of tooth in which the calcification of the pulp was complete; but it was perfectly united to and continuous with the dentine all round the walls of the pulp chamber, which was obliterated thereby.

This is clearly a calcification of the pulp, and not a deposition merely of calcific matter upon the walls of the chamber, for the structure of the pulp is clearly seen in the tissue. We shall have sections of each mounted for microscopic examination, when we shall perhaps have something further to say in reference to them.

History of Vaccination.—The *Pall Mall Gazette* states that the Russian Government has offered a prize of 3000 roubles (£400) for the best history of vaccination, by way of celebrating the hundredth anniversary of the introduction of that practice into Russia by the Empress Catharine II. The prize is open to all European competitors, and the history may be written in any modern European language.—*Boston Med. and Surg. Journal.*

Webster's Unabridged—Illustrated.—In all the essential points of a good dictionary, in the amplitude and selectness of its vocabulary, in the fullness and perspicacity of its definitions, in its orthœpy and (*cum grano salis*) orthography, in its new and trustworthy etymologies, in its elaborate, but not too learned, treatises, of its introduction, in its carefully prepared and valuable appendices,—briefly, in its general accuracy, completeness, and practical utility,—the work is one which *none who read or write can henceforth afford to dispense with.*—*Atlantic Monthly.*

SWEET QUININE.

Dr. Bullock's preparation entitled Sweet Quinine is made from the best Peruvian Bark, and has as positive and reliable tonic and anti-periodic power as the common bitter Quinine. Unlike the latter, however, it has no bitterness, but a sweet taste instead. This Important Advantage constitutes its superiority for use by all—adults or children—who object to the nauseous bitterness of common Quinine.

Sweet Quinine is not offered as a *substitute* for common, bitter Quinine, but to *replace* its use, representing it thoroughly; may be trusted in the most important obstinate cases.

Sweet Quinine is to be used in all Intermittent or other Diseases requiring Quinine or Peruvian Bark. **In ounce bottles.**

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Svapnia is a new and desirable form of *Opium*, purified from all inert matter, such as *egetable fibre*, etc., and with the *Pappaverine, Thebaine, and Narcotine* of the drug removed entirely.

It represents the *Anodyne* and *Soporific* properties of Opium completely, whereas Morphia is but one of them. The alkaloids *Morphia, Narceia, and Codeia*, in this purified Opium, are in the combinations existing naturally in the drug.

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It is solid and permanent, in scales like Citrate of Iron, can be readily powdered or solved in cold water. Patients will bear the *Svapnia* who cannot tolerate Opuim or Morphia. Its effects are more soothing and hypnotic than either.

Those compelled to use Opium habitually will find this much preferable to crude Opium.

Medium dose, for an adult, one grain. **In bottles of half and one ounce.**

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THE

CHICAGO MEDICAL EXAMINER.

N. S. DAVIS, M.D., EDITOR.

VOL. X. JUNE, 1869. NO. 6.

Original Contributions.

ARTICLE XXI.

TRACHEOTOMY SUCCESSFUL IN A CASE OF PSEUDO-MEMBRANEOUS CROUP.

BY H. WARDNER, M.D., of Cairo, Ill.

December 11th, 1868, was called to see Freddie, an infant son of Mr. G. E. Lounsbury, of Mound City, Ill. Learned that on the 9th he was attacked with croup, attended with spasms. On the 10th, all vocal sounds had ceased, and the struggle for life began in earnest. Every medicinal means was used that the present state of medical science could suggest, including emetics, sedatives, alteratives, local applications, lime vapor baths, etc., etc., but all in vain, except some temporary relief at times when the system was greatly relaxed by the treatment.

Death seemed reaching for its victim.

It was so distressing to witness the child's struggles for breath, that tracheotomy was suggested to the parents, as a means of relief that would at least make an easier death, and would afford the only possible chance for life.

Assisted by Dr. N. R. Casey, I performed the operation, at half-past eleven o'clock, on the night of the 15th of December, being the sixth day of the disease. He was then just 13 months old, had a short, fat neck, which, with the small caliber of the soft and yielding trachea, caused the operation to be made

slowly and with delicacy. I was prepared with two double canulas, the smallest of which was too large for the trachea. I then took out the inside tube, and succeeded in introducing it as a single canula. (I am thus particular, because the annoyances I met with may benefit others when in like circumstances.) At the first introduction of air through the tube, the child apparently fainted, and his breathing was intermitting for two or three minutes, when it became regular, and he dropped off into a quiet sleep. On the following day, he appeared much exhausted for a time, but soon began to revive and took some nourishment.

It was found very difficult to keep the single tube clear of mucous accumulations, consequently, a double tube was made as soon as possible by Mr. Tabor, an ingenious silversmith, of this city. On the fourth day after the operation, the tube was removed, and replaced by the newly prepared double canula, in the convex side of which was an aperture corresponding with the tracheal tube, for the purpose of admitting air through the larynx.

On the 8th day, the canula was removed, cleansed, and reädjusted. It was observed that the curve of the canula was too short, so much so that the lower extremity turned forward and pressed against the anterior wall of the trachea, evidently so as to produce an ulcer, as the discoloration of the silver showed that the sulphur of purulent matter must have come in contact with it at that point. This was partially remedied by placing a sort of cushion between the shield of the tube and the neck, thus keeping the tube from dropping in its full length.

On the 15th day, the tube was again removed, but had to be instantly replaced to prevent suffocation. With the coöperation of Dr. C. Gerieke, of St. Louis, I obtained a smaller canula, with a much longer curve, which was introduced on the 22d day. The patient was far more comfortable with this tube, as it did not press upon any very sensitive surface, nor impede deglutition.

At the end of the sixth week this was removed, but could not be dispensed with, and was at once replaced. Calomel was

ordered, to be followed witn the daily administration of muriate of ammonia, and this was followed by tonics.

The patient being eight miles from my office, Dr. Hudson, Surgeon, U. S. N., on duty at Mound City, at my request, consented to watch the case daily. (In this connection, I wish to acknowledge the valuable services so courteously rendered by this intelligent officer during the remaining time of treatment.) Applications of nitrate of silver, 10 grains to the ounce of water, were made to the glottis, every three or four days, by Dr. H., who succeeded on several occasions in passing the probang into the larynx, each time being followed by marked improvement. Granular or polypoid growths were observed on the margin of the tracheal wound, which were touched with solid nitrate, through the aperture in the convexity of the tube. The growths were the frequent cause of severe paroxysms of coughing. At the end of 10 weeks, the tube was again removed, but had to be reinserted without delay.

The child's voice had partially returned, and he could breathe at times quite freely through the larynx. An article by Dr. Jacobi, in the *London Lancet*, led to the belief that these growths at the margin of the tracheal wound were the cause of suffocation on removal of the tube. They were, therefore, more freely cauterized; and, on the 7th of April, upon removing the tube, a small tumor came away with it. A marked improvement was observed this time; the patient was two or three minutes without the tube, and but little discoloration of face from want of air followed. The tube removed was replaced by another new one, made after a drawing by C. Degenhardt, of Chicago. This tube was just the thing, a much better fit than the last one. The patient had almost fully regained his voice, had learned to walk, and had cut seven teeth. I requested Dr. H. to remove the tube every four days, to mark the improvement, and leave it out entirely soon as it could be withdrawn with safety. On the 18th of April, 1869, just 128 days from the time of the operation, it was finally dispensed with. The opening closed within 72 hours. The *patient is well.*

I desire to acknowledge valuable suggestions in the treatment

of this case from Dr. W. H. Byford, of Chicago, Dr. Paul F. Eve, of Nashville, and Dr. Abraham Jacobi, of New York City.

During the entire treatment, the child was kept in a large room, well ventilated, in which the thermometer was not allowed to vary five degrees day or night.

He was well fed on milk and such diet of a nourishing but digestible character as he would take.

The day before the operation, I gave him eight grains of calomel at one dose, feeling that I could afford to try anything in which there was the slightest possibility of relief; and I cannot help but think that this heroic dose stopped the disease from extending downwards into the lungs. I also believe that the polypoid or granular tumor on the margin of the tracheal wound was the cause of the tube being retained longer that it otherwise would have been had that not appeared.

The case also shows the necessity of having the canula made so as to fit the parts with the utmost precision compatible with circumstances. It also shows that life *may be* saved by the operation when all else fails.

ARTICLE XXII.

HÆMATEMESIS.

By F. K. BAILEY, M.D., Knoxville, Tennessee.

I was called, November 18th, 1868, to see a lady, aged 52, a native of one of the New England States, but for 30 years resident of a malarious district in Ohio. For 35 years she had suffered from a painful affection of the stomach, which was called by her physicians dyspepsia. During the last 10 years, she had been subject to chills, attended with great depression, palpitation, fainting, and other symptoms indicating shock to the vital powers. In October, she came to this place, her medical attendant having advised change of climate, and who also expressed his opinion that she could not survive another Northern winter. She endured the journey without much fatigue,

and finding herself very pleasantly situated at the home of her son, as well as feeling that the mildness of our autumn air might prove beneficial, was greatly encouraged with the prospect of improving health.

November 16th. She walked about half a mile, and returned feeling somewhat fatigued. The next day she felt symptoms of a chill, such as she had experienced for a long time after over-exertion, and took some quinine.

During the forenoon of the 18th, she became suddenly faint, and very distressingly sick at the stomach. In a few minutes, she vomited more than a pint of partially coagulated blood.

I was soon called, and saw her before reaction was established. I found the blood she had vomited was unchanged in color, and it appeared as though it had flowed very rapidly from an artery. She was deathly pale; pulse 130, and very feeble. Not able to speak so as to give any statement of her feelings. A member of the family had given her some common salt, before my arrival, and she had not thrown up any blood after it was administered.

I gave her two grains of acetate of lead, and six grains of Dover's powder; applied sinapisms to the pit of the stomach and the feet. In about 15 minutes after my arrival at the bedside, she threw up four or five ounces of dark blood. Reaction came up very slowly, and it was nearly dark before she was able to converse sufficiently to give an account of her feelings, or a history of her case. Having never seen her before, I could learn nothing from her, except what she was able to tell while still very feeble.

Judging from her paleness of countenance, and the fact of a residence in a malarious district, I suspected congestion of some of the abdominal viscera. To obviate a possible recurrence, after an interval of the usual length of time in intermittents, I gave sulphate of quinine, in 5-grain doses, to be repeated every three hours. Also ordered warm toddy to be given occasionally during the night, and to keep the extremities warm.

Thursday, 19th: *8 A.M.* My patient has slept but little during the night, was very restless, and suffered extremely from nausea and general depression. Pulse 140, small and feeble.

No vomiting; but still complains of severe distress and nausea. To continue quinine in lesser doses, and to give persulphate of iron in solution, every hour.

7 P.M. Still very restless, and much depressed. Pulse 140, very small, and slightly wiry. Tenderness on pressure over the region of the stomach, and as low as the umbilicus. Indications of peritoneal inflammation in the small wiry pulse, and a redness of the tongue.

Prescribed bromide potassa, in 15-grain doses, every three hours. Small doses sulph. quinine, and stimulation, if the pulse should become more feeble.

Friday, 20th: *7 A.M.* My patient had slept four or five hours during the night, and expressed herself as feeling much better. No vomiting, nor has there been any alvine evacuation since the attack. No abdominal distention. Great thirst, with some nausea. Pulse 140, and still very small. To take mucilage gum Arabic, with eight drops oil turpentine, every three hours, and toddy *pro re nata.*

7 P.M. No improvement in general appearance. There has been one evacuation from the bowels of a very dark grumous appearance, evidently changed blood. To continue mucilage and stimulants.

Saturday, 21st: *8 A.M.* Patient has slept but little during the night. Pulse very small, and 150. No vomiting. To take toddy and beef-tea. Was called at noon, and found she had vomited a half pint of blood, coagulated, and very dark, and voided, at the same time, a quantity of very black grumous substance from the bowels. Very much exhausted. Pulse 160, and hardly perceptible.

Continued to sink, and expired at midnight.

There was no *post mortem* examination.

The above case seems to be one of a class, in which a person will suffer from a painful affection of the stomach for years, and will be treated for gastrodynia, or neuralgia. The mere fact of vomiting blood throws but little light upon this case; for although the blood came from the stomach, we do not know how it came to be in that cavity. From the fact of the blood vomited

being fresh, together with the quantity, would indicate that it escaped from no small source. If it had escaped slowly from the mucous membrane of the stomach, the color would have been changed.

Remarks illustrative of this are found in No. 57, page 113.

Writers speak of cases in which blood will escape from a vessel denuded in a malignant tumor, which may have been forming for years, and suddenly ruptured.

There seemed to me some indications of inflammation of a low grade, following immediately upon the escape of the blood, shown by the small and very frequent pulse.

I have known, at different times in my practise, cases in which a person will have occasional attacks of vomiting pus, mixed with blood, which at last terminated fatally.

The diagnosis in those cases was, an ulcer, which would at intervals pour out its contents into the duodenum, or stomach, to be rejected by vomiting, and also accompanied with a profuse quantity of the same matter, evacuated from the rectum. I think I never before met with *such* a case as the one above described.

Vomiting of blood is often met with from vicarious menstruation, and local congestion of the gastric mucous membrane, which may be easily relieved.

Some 20 years ago, I had a case of a simple quotidian intermittent, in which the patient, a very large and fat man, vomited blood very freely during the hot stage. The blood ejected was fresh, and not coagulated in the least.

He had a second or third recurrence of paroxysms before anti-periodics could be made to suspend the disease; and the vomiting of blood invariably returned with the hot stage. I will add that the subject was a person addicted to excessive use of intoxicating drinks, and as a congestion of the mucous lining of the stomach is known to exist in such cases, the escape of blood is easily accounted for in the hot stage of fever.

Hæmatemesis is, by some, placed in the list of diseases of the stomach; but it can only be considered as a result of some other morbid condition. Vomiting of blood should no more be called

a distinct disease than vomiting of bile; and when we find a person throwing from the stomach a quantity of blood, the cause of its presence in that cavity must be sought, and means adopted for its removal.

ARTICLE XXIII.

ALARMING DENTAL HEMORRHAGE.

By A. J. EIDSON, M.D., Colchester, Ill.

On the morning of July 5th, 1868, at two o'clock A.M., I was called to see Columbus H., aged 18, of sanguine temperament, good physical development, and by occupation a farmer. He had suffered from odontalgia for a week, and on the previous day had had the middle and posterior molars of the right side of the *os maxillare inferius* extracted by a dentist; one at 10 A.M., the other at 3 P.M. There was considerable hemorrhage from the first, which became augmented when the second tooth was drawn. The young man returned home at 6 P.M.; the bleeding continued without abatement. Domestic remedies were used, *viz.:* salt, alum, and cold water, without effect; and professional aid was deemed indispensable.

I found the family in a state of anxiety and alarm. The patient was lying on a pallet on the floor. The pillow was saturated with blood. A large cloth with which he wiped his mouth was deeply dyed with the *liquor sanguinis.* The floor was spattered for several feet around the bed with mouthfuls of coagula. In a vessel was contained more than a pint of the life-current. From loss of blood and rest, the patient was much inclined to sleep, which, however, was only obtained in snatches, on account of the accumulation of coagula and threatened strangulation.

The appearance of the patient was striking. There was jactitation and subsultus; the face pale and haggard; pulse 90, weak and fluttering. Every 15 or 20 minutes he had partial fainting, with nausea, at which times the bleeding abated, only to increase when the system rallied.

I ordered a compress of carded cotton, soaked in a saturated solution of acid tanicum, laid on the gums, to be firmly retained by forcibly closing the jaws. This checked the flow for a short time. Firm pressure on the carotid artery moderated the hemorrhage. Not having a more powerful styptic at hand, I broke up the coagula in the bleeding sockets, and with a small pointed syringe injected the *tinct. ferri chlo.*, as near the seat of hemorrhage as possible. I then saturated a fresh compress of cotton with the tincture, and applied as the first, enjoined the patient to make firm pressure with the lower jaw. The bleeding was at once arrested, but returned in about an hour. A fresh compress, prepared as before, was applied, and the bleeding ceased for three hours, when it partially returned. The cotton and superficial coagula were removed; another application of the remedy as before, and the hemorrhage was permanently arrested. Rest and quiet were enjoined, and a nutritious diet ordered, with the following:—

℞. Tinct. Ferri Chlo., S. M. x. Three times a day.

This to be followed in four or five days with—

℞. Elixir Calisa. Ferrat., S. ℥iv. Three times a day.

Patient's recovery somewhat tedious, but satisfactory and complete.

I ascertained that both parents of the young man were of the hemorrhagic diathesis, and that every member of the family was prone to bleed much and persistently from slight abrasions. None of them, except the patient, had ever had teeth extracted at adult age.

ARTICLE XXIV.

EXTRACTION OF A NEEDLE.

By C. N. COOPER, M.D.

In May, 1868, Gertrude C., aged 2 years, was suddenly seized with violent coughs, choking, and dyspnœa, which lasted several hours, after which she breathed naturally. In November following, she complained that something hurt her back.

On examination, a foreign substance, apparently a small pin, was discovered just below the inferior angle of the right scapula, pointing externally. It disappeared and reappeared several times. *April 13th.* I was called, with Dr. Clemmer, of this city, to examine the child, and, if practicable, remove the offending substance. We cut down upon the point, seized with forceps, and extracted the pointed end of a needle, about eight lines in length.

There was no suppuration before nor after the operation. Is it probable that the needle passed down the larynx and worked its way through the tissues to the surface? Is it more probable that it was thrust into the tissues from without, unnoticed by the child and its attendants?

I should be glad to hear any suggestions on this point.

Cresco, Iowa, *April 27th, 1869.*

Original Translations.

NEW INVESTIGATIONS CONCERNING EPILEPSY, RESULTING FROM CERTAIN LESIONS OF THE SPINAL NERVE.

By DR. BROWN-SÉQUARD.

Epilepsy is an affection of man so terrible and so difficult to cure, that it is important to collect with the greatest care all facts capable of affording any light upon so frightful a malady.

In the year 1850, I found that certain lesions of the spinal cord would produce epileptiform convulsions among Guinea-pigs; and since that time I have not ceased to experiment upon the numerous epileptic animals which I have had constantly at my disposal. During the winter of 1866-7, after having submitted a great number of Guinea-pigs to the principal lesions which produce epilepsy, I had opportunity to make many new observations that have not been given to the public as yet, except very briefly, in my course at the Medical College of Cam-

bridge University (United States), and in two recent communications to the Academy of Medicine, at Paris. I propose to present here, with some detail, the greater part of these, as well as some previous observations relative to the physiology of epilepsy:—

I. LESIONS WHICH PRODUCE EPILEPSY AMONG GUINEA-PIGS.

In a paper read at the Academy of Science, January 1st, 1856, I announced the following lesions of the medulla spinalis as capable of producing this affection:—

1st. Complete, or nearly complete, transverse section of one lateral half.

2d. Simultaneous transverse section of the posterior cords of the posterior gray cornua, and of one part of the lateral cords.

3d. Transverse section, either of the two posterior or the lateral cords, or, finally, of the anterior cords only.

4th. Complete transverse section.

5th. A simple puncture.

Without exception, all the Guinea-pigs that have survived the first, second, or fourth of these wounds more than five or six weeks have been attacked by epilepsy.

I can repeat, then, to-day, what I said in 1856, that a complete transverse section of the spinal nervous centre, or of a little more than the posterior half of this organ, or, finally, of one of its lateral halves, after a certain length of time, invariably produce a convulsive epileptiform affection among Guinea-pigs, which, as I shall show hereafter, has all the essential characteristics of epilepsy in the human being.

Of the three great white cords of the medulla spinalis—the anterior, the lateral, and the posterior—the section of the last, especially, is capable of producing epilepsy. But *complete* epilepsy does not usually follow injuries, limited to any one of these parts.

The section of one or the other of these cords, on one side only, rarely occasions complete epilepsy; the same is true of the simultaneous transverse section of one of the posterior gray cornua, and of some fibres of the two neighboring white cords.

Moreover, as I had already discovered in 1856, a fully developed form of epilepsy may be the result of a simple puncture of the spinal nerve, particularly in its posterior half.

Among Guinea-pigs that do not become epileptic after an injury of the spinal nerve, it is quite frequent, after irritating certain portions of the skin, to notice some reflex convulsive motion of the face, or the members not paralyzed. The agitation is similar to that observed among animals which should become epileptic a few days or a week before the appearance of a complete attack. It may be considered, therefore, of an epileptic nature.

II. PARTS OF THE NERVOUS SYSTEM, THE LESION OF WHICH FREQUENTLY OR ALWAYS PRODUCES EPILEPSY AMONG GUINEA-PIGS.

It is probable that nearly if not all the parts of the medulla spinalis, from the origin of the first pair of cervical nerves to the coccygeal termination of this nervous centre, are capable of producing epilepsy, after receiving a wound by incision. But the affection never fails to occur after an injury of the part, extending from the seventh or eighth dorsal vertebræ to the second or third lumbar, if the operation is one of those I have previously indicated as invariably followed by epilepsy. The spinal marrow, from the third lumbar vertebra to the coccygeal termination, loses continually its power to occasion this malady.

I am not prepared to say whether the part of the medulla spinalis which gives origin to the last two cervical and the first four dorsal pairs can produce epilepsy or not. When I have removed a complete or nearly complete lateral half of the nervous centre, in this region, the animals have all died before the time for the appearance of the paroxysm. After the section of the posterior half of the spinal cord, or of one of the lateral halves, between the second and fifth pairs of nerves in the cervical region, if death should not occur in less than four or five weeks, epilepsy usually manifests itself. It is evident from these facts that nearly all parts of the spinal nerve, considered in its length, can produce epilepsy when irritated by incision. But all these parts, except that having its centre in the region

just indicated, possess, only partially, the power of engendering this disease. It can not be said that epilepsy always or frequently follows extensive lesions of the rachidien bulb among these animals. After such operations, the duration of life is far too short to render the solution of this question possible.

Meanwhile, I have frequently seen Guinea-pigs survive for many months a transverse section of the restiform body, of the intermediate cord, or of one of the anterior pyramids; and I have never seen among them either simple, reflex convulsions, in the parts not paralyzed, or epileptic attacks, spontaneous or provoked. At the present time, there are near me seven of these creatures, having the restiform body of one or both sides cut transversely in the vicinity of the calamus scriptorius. With the exception of anæsthesia in some parts, and a little hyperæsthesia in others, they are, to all appearance, in perfect health, with no paralysis of the body or limbs. There have been no spontaneous convulsions among them, and the liveliest irritations of the skin in the region of the head, neck, etc., have never occasioned spasmodic phenomena. Some were submitted to the operation six months ago, others only two months since.

Guinea-pigs have frequently lived after I have removed the V of gray substance of the calamus scriptorious, and a small quantity of the neighboring gray substance. Convulsions have never followed this operation, save in one instance. But in this exceptional case, the attacks of epilepsy were the most violent I have ever witnessed among these creatures. From this animal I removed the part of the rachidien bulb, which Flourens calls the centrum vitale. The operation was made during one of my lectures at the Royal College of Surgeons, in London, May, 1858. The subject died from accident in September, 1860, having had, meanwhile, at least five or six convulsions daily for several months preceding its death. I shall have occasion to say hereafter that its attacks differed in many respects from those caused by wounds in the lumbar or dorsal regions.

Injury of the nerves may also give rise to epilepsy among

Guinea-pigs. Twice, I have observed this disorder after section of the sciatic nerve,* and I have frequently seen it follow section of the roots of four or five dorsal nerves on one side. Have I wounded the spinal cord in making the section of the roots? It seems to me absolutely impossible that it should be thus in every case, and, therefore, I believe it safe to conclude that epilepsy can be produced among these creatures, by sections of the roots of the spinal nerves.

The facts I have just mentioned are quite valuable for the demonstration of a relation of causality between the injuries of the medulla spinalis and of other parts of the nervous system, on one side, by the frequent appearance of epilepsy, and on the other, by the non-existence of spontaneous epilepsy, or at least its extreme rarity in this species of animals, in which these operations produce more or less frequently this nervous affection. For 30 years, I have had near me a considerable number of Guinea-pigs (certainly many thousands), and I have never observed epileptic attacks among them, except in those submitted to the operations specified, or among their descendants. That cannot authorize me to affirm that idiopathic epilepsy never exists in this species of mammifera, but at least it suffices to show that epilepsy if the frequent attendant of certain lesions, is, assuredly, the result of these lesions.

III. TIME OF THE APPEARANCE OF EPILEPSY AFTER INJURIES OF THE SPINAL NERVE AMONG GUINEA-PIGS.

I have said, previously, that this convulsive affection manifests itself in the third week after the operation. This is true, ordinarily, of the simple reflex convulsions; but complete epilepsy usually appears only in the fourth or fifth week after the injury. Sometimes the convulsions manifest themselves much sooner—in one case, at the end of six days, and in some others, in eight or ten days. Without exception, all animals that have

*My colleague, M. Vulpian, told me that he had observed epilepsy in a Guinea-pig possessing the sciatic nerve. Aside from this case, he has never seen the disease among these animals, from which we may conclude that it must be extremely rare, when we consider the immense number of Guinea-pigs that he has near him, in the laboratory of Flourens, and elsewhere.

survived for a sufficient time one of the lesions invariably followed by epilepsy have had their first attack previous to the end of the eighth week.

Animals well fed, and surrounded by good hygienic influences, are attacked much later than those poorly fed, exposed to cold, dampness, etc.

The more extensive the injury of the spinal nerve the sooner in general epilepsy ensues.

Among very young Guinea-pigs this affection is usually more tardy in making its appearance than among those three or four months old.

IV. PARTS OF THE SKIN WHICH ARE CAPABLE, WHEN IRRITATED, OF PRODUCING AN ATTACK OF EPILEPSY AMONG GUINEA-PIGS, HAVING UNDERGONE AN OPERATION OF THE SPINAL NERVE.

For some time, I believed that after a section of the lateral half of the nerve, in the vicinity of the tenth dorsal vertebra, epileptic convulsions were provoked by irritation of the hyperæsthetic member. The supposition was quite natural, as there was no reason to foresee or even to suppose that, in a region remote and anterior to the place of injury to the vertebral column, any particular part of the skin when irritated was alone capable of producing such results. In order to provoke the attack, I pinched the hyperæsthetic member, while holding the animal in my left hand with one or two fingers touching the face and neck. There was immediate distress and very great agitation of the animal, producing some friction of the face and neck, that is, an irritation of the only parts really capable of causing the paroxysm. When this took place, under such conditions, it seemed apparent that the irritation of the hyperæsthetic member had engendered it. But after finding the convulsions also occurred, when I held, in the same manner, a Guinea-pig that had undergone a complete transverse section of the dorsal nerve, and, consequently, no sensibility existing in the posterior region, the irritation of which only produced reflex motion, it became evident that my first opinion was false. I was then led to inquire what were the parts of the anterior region the irritation of which would cause the attack? and I

was not long in deciding that the face was one of these parts. I immediately extended my investigations in this subject, and I ascertained:—1st. That it is only on the side of a unilateral lesion of the spinal nerve that certain portions of the skin acquire the faculty of occasioning an attack of epilepsy when irritated. 2d. That these portions of the skin are those of one part of the face and neck. 3d. That the nerves which are distributed to these portions of the skin originate from the trigeminal and the second and third pairs of rachidian nerves.

My latest investigations in this subject confirm what I had already briefly announced in 1856, at the Academy of Medicine, that the irritation of a certain zone of the skin would produce epileptic paroxysms, in cases where epilepsy had followed the section of one lateral half of the spinal cord. The limits of this zone, as I have discovered them, are represented by the dotted lines in Figure 1.

These limits, as it appears, are slightly curved lines which circumscribe an ovular space, which, in the adult Guinea-pigs, is about five centimetres long, and three and a-half or three and three-fourths centimetres in width. If we should draw, as in the figure just mentioned, a line from the anterior palpebral-angle to the projection of the superior maxillary bone, which forms the lower limit of the suborbitar fossa, from there to the middle of the lower jaw, from this point, passing below the angle of the jaw to the scapulo humeral articulation, thence reascending along the anterior edge of the shoulder-blade, until the middle point of its length is reached, from this last point into the attachment of the lobe of the ear, and, finally, from there to the point of departure, the anterior palpebral angle, passing below and very near the edge of the lower eyelid, we inclose the excitable region. All other parts of the body, including the hyperæsthetic portions of the skin, back of the seat of hemisection of the spinal nervous centre, without producing any spasmodic action, without even any convulsive movements of the face, head, and eyes, which are frequently manifested after very slight irritation of the zone capable of producing an attack.

On the head and neck, we can, without exciting convulsions,

irritate severely the skin or membrane of the nose, lips, tongue, conjunctiva, upper eyelid, edge of the lower eyelid, space comprized between the eyes, ears, shoulders, and head, and also between the lower jaws (except in a very short space along the inferior maxillary). I repeat, then, there is only the zone of skin on the head and neck, that may be capable under the influence of severe or trivial irritation of occasioning epileptic spasms, among Guinea-pigs that have been submitted to the operation designated.

It is not always thus in cases where there has been a complete or nearly complete transverse section of the spinal cord. On the contrary, it is most common to find that besides the zone described above, and which in these cases, on both sides, has power to cause convulsions, other parts of the skin possess the same faculty. The skin between the right and left zones, which extends over the last four cervical vertebra, and, especially, that portion comprised between the scapulæ, has also power to cause attacks of complete epilepsy, or spasmodic action of some muscles of the face, neck, and anterior members. This zone, intermediate to the other two, sometimes extends back even to the region of the cicatrix, where the incision was made, and the vertebral canal was opened to allow the section of the nerve. Sometimes I have even seen a paroxysm occur after irritation of the cicatrix; but, as in the very same animals where I have observed this phenomena, I have not been able to reproduce it in numerous experiments, it is possible that the local disturbance may have affected the parts of the skin anterior to the cicatrix, and thus have caused the attack by irritation of those portions possessing undue excitability. When the lesion, consisting of a transverse section of the posterior half of the spinal nerve, on both sides, is more extensive on one side than the other, it is found, very frequently, that only one side of the face or neck is capable of producing convulsions. In these cases, the zone of the skin which acquires this morbid property is always found on the side where the nerve has been more severely wounded. Then, sometimes, portions of the skin beyond the zone limited to one side of the neck and face, and

pertaining to the intermediate zone just alluded to, have also the power to bring on the spasms. The portion comprised between the scapulæ especially possesses this faculty.

Now and then, too, a lesion of the two posterior thirds of the spinal cord, on both sides, renders both sides of the face and neck capable of producing the convulsions, the same as occurs after a complete transverse section of this nervous centre. But there is this difference in the two cases, that in the first, the intermediate zone of which I have spoken, does not acquire, usually, the power of causing an attack, while, in the second case, on the contrary, this almost invariably takes place.

In the zone of skin on the face and neck, the points seeming most excitable are found at the angle of the jaw, below the eye, and at the middle of the lower edge of the scapula.

V. NERVES WHICH ARE DISTRIBUTED IN THE ZONE OF SKIN CAPABLE OF CAUSING AN EPILEPTIC ATTACK.

Among Guinea-pigs having undergone a transverse section of one lateral half of the spinal cord, this sensitive zone of skin receives ramifications from one cranial nerve, the trigeminal, and some of the cervical pairs. Of the three great branches of the trigeminal, the ophthalmic does not furnish ramifications to this zone; the other two supply it, particularly by the infra-orbital and the auricular temporal. The posterior branches of the second, third, and fourth pairs of cervical nerves are especially distributed in this space.

As I have already said, when there is a complete or nearly complete transverse section of the spinal cord, beyond the ordinary zone, on both sides of the head and neck, there is an intermediate zone over the last cervical vertibræ, and a part of the dorsal vertibræ, also capable of causing spasms when irritated. The branches of nerves which distribute themselves in this new zone of skin originate nearly, if not entirely, from the posterior branches of the spinal nerves, in a part of the cervical and dorsal regions.

(*To be continued.*)

Proceedings of Societies.

DeWITT COUNTY MEDICAL SOCIETY.

The Society met in annual session at the office of Drs. Goodbrake & Edmiston, in the City of Clinton.

The President, Dr. J. A. Edmiston, in the chair.

Minutes of last meeting read and approved.

Dr. W. G. Cochran, of Farmer City, was proposed for membership and elected.

Officers for the ensuing year:—President, Dr. John Wright; Vice-President, Dr. J. W. Edmiston; Treasurer, Dr. C. Goodbrake; Secretary, Dr. Edmiston; Censors, Drs. W. G. Cochran, C. Goodbrake, J. H. Tyler.

Dr. Wright, in a neat speech, returned thanks for the honor conferred upon him.

The retiring President, Dr. J. A. Edmiston, asked until next regular meeting to complete his annual address, which was, on motion, granted.

Drs. C. Goodbrake and John Wright were elected delegates to the American Medical Association for the next year; and Drs. C. Goodbrake, J. Wright, and B. S. Lewis were elected delegates to the Illinois Medical Society, with power to designate alternates in case of inability to attend.

Various subjects were brought before the meeting and discussed at length.

Drs. W. G. Cochran and J. H. Tyler were appointed essayists.

On motion, the Secretary was instructed to furnish copies of proceedings to the Clinton papers and Chicago medical journals, for publication.

On motion, adjourned until next regular meeting.

JOHN A. EDMISTON, *Secretary.*

ASSOCIATION OF AMERICAN MEDICAL EDITORS.

Not the least among the important results of the recent meeting of the American Medical Association, in New Orleans, was the formation of a permanent association, composed of those engaged in the work of medical journalism. A few weeks previous to the meeting in New Orleans, the idea of holding a separate conference by the editors of medical journals was suggested by Dr. Parvin, Editor of the *Western Journal of Medicine.* The suggestion was cordially accepted by such editors as were present; and, after one or two preliminary meetings, a permanent organization was effected, on the evening of May 6th, as follows:—

Pursuant to adjournment from the preliminary meeting on Tuesday, the meeting of Medical Journalists was called to order, at 8 o'clock P.M., by Dr. N. S. Davis, of the CHICAGO MEDICAL EXAMINER.

The Committee on Organization, through their Chairman, Dr. Theophilus Parvin, of the *Western Journal of Medicine*, then presented the following preamble and plan of organization, which was unanimously adopted:—

"The editors of medical journals in the United States, desiring to cultivate professional courtesies, to facilitate the conduct and general management of our journals, to promote their interests, their usefulness, and make them a still greater power for professional and popular good, and especially to advance the interests of medicine, hereby unite together under the following

ARTICLES OF ASSOCIATION.

Name.—The Association of American Medical Editors.

Purposes.—The cultivation of friendly relations, mutual assistance, community of effort and means, where practicable, in a system of receiving foreign exchanges, and of sending our own journals abroad; in urging, with hearty concert, improvements in the present system of medical education, and a higher standard of preliminary education of those who desire to enter upon the study of medicine; the collection of vital statistics; the collecting of the names of all the regular physicians in the

United States, age, place, and date of graduation, if a graduate; also, the same in reference to graduation at literary institutions, if such graduation has taken place.

Meetings.—These shall be held, commencing at 10 A.M., on the day preceding, and at the place of the annual meeting of the American Medical Association.

Officers.—President, Vice-President, Permanent-Secretary, and Secretary.

The President, Vice-President, and Secretary shall be elected annually, and shall serve at the meeting of the succeeding year.

Committees shall be appointed, where necessary, for the carrying out of any of the special purposes of the Association."

These resolutions having been signed by the following delegates:—Dr. N. S. Davis, CHICAGO MEDICAL EXAMINER; Dr. Jas. M. Halloway, *Richmond and Louisville Medical Journal;* Dr. Wm. M. McPheeters, *St. Louis Medical and Surgical Reporter;* Dr. W. R. Bowling, *Nashville Journal of Medicine;* Dr. J. Berien Lindsley, *Nashville Journal of Medicine;* Dr. Greensville Dowell, *Galveston Medical Journal;* Dr. Samuel Logan, *New Orleans Journal of Medicine;* Dr. S. S. Herrick, *New Orleans Journal of Medicine;* Dr. E. W. Jenks, and Dr. Geo. D. Andrews, *Detroit Review of Medicine and Pharmacy;* Dr. W. S. Mitchell, *New Orleans Journal of Medicine;* and Dr. S. M. Bemiss, *New Orleans Journal of Medicine.* The officers, as follows, were unanimously elected:—

Dr. N. S. Davis, President; Dr. W. M. McPheeters, Vice-President; Dr. W. S. Mitchell, Permanent-Secretary, and Dr. J. Berien Lindsley, Secretary.

The following resolutions were unanimously adopted:—"That a committee on foreign exchanges be appointed, to consist of Dr. Parvin, as Chairman, and the Permanent-Secretary.

That the Permanent-Secretary be instructed to correspond with such regular medical journals of the United States as are not now represented, informing them of the objects of the organization, and inviting their coöperation.

That a committee consisting of Drs. Bowling, Dowell, and Andrews be appointed on the Registry of Physicians.

That the President deliver at the next meeting an address on the history, progress, etc., of medical journalism in this country, and that the members of the Association furnish to him such material and information as they may be able to obtain.

That beside the members already signing the constitution, all physicians connected with regular medical journals be considered members, upon signifying in writing to the Permanent-Secretary their willingness to subscribe to the foregoing articles of agreement, until opportunity be afforded them of signing said articles.

That the President be requested to announce to the American Medical Association the formation and objects of this Association.

That these minutes be furnished to the secular papers, with a request that they be copied.

That Dr. Halloway be appointed a committee to arrange a general plan of commutation between medical journals.

That the Committee on Exchanges be instructed to arrange some general plan for the establishment of agencies in all the principal cities.

There being no further business, the meeting adjourned.

AMERICAN MEDICAL ASSOCIATION.

The American Medical Association met in the hall of the Mechanics' Institute, in the City of New Orleans, May 4th, 1869.

The following is a reliable abstract of its proceedings, corrected from the *New Orleans Times*:—

PROCEEDINGS OF THE OPENING DAY.

The American Medical Association met in the Mechanics' Institute, at 11 A.M.

The President, Dr. W. O. Baldwin, of Alabama, occupied the Chair, assisted by Vice-Presidents Drs. Geo. Mendenhall, of Ohio, and S. M. Bemis, of Louisiana.

The Permanent-Secretary, Dr. W. B. Atkinson, of Pennsylvania, and Assistant-Secretary, Dr. A. J. Semmes, of Georgia, were present.

The President invited to seats on the platform Drs. Warren Stone and A. Lopez, of New Orleans, and ex-Presidents H. F. Askew, of Delaware, N. S. Davis, of Illinois, and Alden March, of New York.

The session was opened with prayer by Rev. Mr. Gallaher, of New Orleans.

Dr. T. G. Richardson, of Louisiana, Chairman of the Committee of Arrangements, welcomed the delegates to the city in an eloquent address.

He announced that the session would be held from 9 A.M. to 2 P.M., and the Sections would meet at 3 P.M., in the Mechanics' Institute, and in the University.

On motion of Dr. Richardson, the following gentlemen were elected members by invitation:—Drs. Taney, Legare, Anfoux, Tebault, Barnes, of New Orleans, and McFarland, of Mississippi.

The President then delivered the annual address.

On motion of Dr. Askew, of Delaware, it was referred to the Committee of Publication.

Letters were read by the Permanent-Secretary from Drs. S. D. Gross, of Pennsylvania, W. Byard, and W. Canniff, of Canada, and R. A. Kinloch, Chairman of Medical Society of South Carolina, expressing regret at their inability to be present on this occasion.

Reports of special committees were called for.

Disease of Cornea.—No report.

Cultivation of Cinchona Tree, reported progress, and on motion of Dr. Toner, District of Columbia, Dr. T. Antisell, District of Columbia, was added to that committee.

Excision of Joints for Injuries.—No report.

Alcohol and its Relation to Medicine.—Dr. Jno. Bell, Pennsylvania, presented a report, which was referred to the Section of Practice of Medicine.

On the Cryptogamic Origin of Disease, with special reference

to Recent Microscopic Investigations on that Subject.—Dr. Edward Curtis, U. S. A., Chairman. Reported, and referred to Section on Meteorology and Epidemics.

On Operations for Hare-lip: Dr. A. Hammer, Missouri, Chairman.—No report.

On Clinical Thermometry in Diphtheria: Dr. Jos. G. Richardson, New York, Chairman.—Discharged at his own request.

On Prophylactics in Zymotic Diseases: Dr. Nelson L. North, New York, Chairman.—Reported and referred to Section on Meteorology and Epidemics.

On Inebriate Asylums: Dr. C. H. Nichols, D. C., Chairman. —No report.

On the influence of the Pneumogastric Nerve on Spasmodic and Rhythmical Movements of the Lungs: Dr. Thomas Antisell, D. C., Chairman.—No report.

To Examine into the Present Plan of Organization and Management of the United States Marine Hospitals: Dr. D. W. Bliss, D. C., Chairman.—No report.

On the Utilization of Sewerage: Dr. Stephen Smith, New York, Chairman.—No report.

On the Influence of Quarantine in Preventing the Introduction of Disease into the Ports of the United States: Dr. Elisha Harris, New York, Chairman.—No report.

On Nurse-Training Institutions: Dr. Samuel D. Gross, Pennsylvania, Chairman.—Reported, and referred to Section on Practical Medicine.

On Commissioners to Aid in Trials Involving Scientific Testimony: Dr. John Ordronaux, New York, Chairman.—Reported, and referred to Section on Medical Jurisprudence.

On Annual Medical Register: Dr. John H. Packard, Pennsylvania, Chairman.—Reported progress, and, on motion of Dr. Mussey, of Ohio, it was—

Resolved, That each State Medical Society be requested to prepare an Annual Register of all the regular practitioners of medicine in their respective States, giving the name of the colleges in which they may have graduated, and date of diploma or license.

On Devising a Plan for the Relief of Widows and Orphans of Medical Men: Dr. John H. Griscom, New York, Chairman. —Reported, which was referred to the Committee of Publication.

On Veterinary Colleges: Dr. Thomas Antisell, District of Columbia, Chairman.—Reported progress and was continued.

On Specialities in Medicine, and the Propriety of Specialists Advertising: Dr. E. Lloyd Howard, Maryland, Chairman.— Reported, and was, on motion, made the special order for Wednesday, at 12 M.

On Library of American Medical Works: Dr. J. M. Toner, D. C., Chairman.—Reported, and was, on motion of Dr. Davis, made special order for Wednesday, at 1 P.M.

On Vaccination: Dr. Henry A. Martin, Massachusetts, Chairman.—No report.

On the Decomposition of Urea in Uræmic Poisoning: Dr. H. R. Noel, Maryland, Chairman.—No report.

On the Best Method of Treatment for the Different Forms of Cleft Palate: Dr. J. R. Whitehead, New York, Chairman. —Reported and referred to Section on Surgery.

On Rank of Medical Men in the Navy: Dr. N. S. Davis, Illinois, Chairman, announced that their last year's report was final, and committee was discharged.

The report on Medical Ethics by Dr. D. Francis Condie, Pennsylvania, Chairman, was read by Dr. Davis, and adopted.

On American Medical Necrology: Dr. C. C. Cox, Maryland, Chairman.—Reported progress, and was continued on motion of Dr. Davis. Dr. Cox was authorized to fill all vacancies on his committee.

Voluntary communications were presented by Dr. Jos. Jones, of Louisiana, on Mollities Ossuim; and referred to Section on Surgery.

On Cases of Lead Palsy from Use of Cosmetics. By Dr. L. Sayre, of New York. Referred to Section on Hygiene.

On the Physiology and Chemistry of Longevity. By Dr. Cutler, of Mississippi. Referred to Section on Hygiene.

On the Protective and Preventive Uses of Quinine. By Dr.

S. Rogers, of New York. Referred to Section on Practical Medicine.

On the Tongue in Malarious Diseases. By Dr. Osborn, of Alabama. Referred to Section on Practical Medicine.

On the Warm Cerebro-Spinal Bath in the Treatment of Congenital Apnœa, and on a New Method of Artificial Respiration. By E. D. McDaniel, of Alabama. Referred to Section on Practical Medicine.

Reports on Climatology and Epidemics were received from Drs. Thoms, of New York; T. J. Heard, of Texas; F. W. Hatch, of California; E. A. Hildreth, of West Virginia; which were referred to the Section on Climatology and Epidemics.

Reports of progress were received from Drs. Hamill, of Illinois; A. Sager, of Michigan; Compson, of Mississippi; and Pimm, of Louisiana.

On the motion of Dr. Davis, the Report on the Revision of the Plan of Organization was made the special order for Wednesday, at 10 A.M.

Papers relative to Medical Education were read, and referred, on motion of Dr. Davis, to a special committee of five, to be appointed by the President.

The President appointed Drs. Davis, Illinois; P. F. Eve, Tennessee; E. S. Gaillard, Kentucky; E. Lee Jones, New York; and J. K. Bartlett, Wisconsin.

On motion, adjourned until Wednesday, at 9 A.M.

SECOND DAY'S PROCEEDINGS.

At 9 A.M., Dr. W. O. Baldwin, the President, in the Chair, called the meeting to order. The reading of the minutes having been dispensed with, Dr. Richardson, the Chairman of the Committee of Arrangements, presented the names of the following candidates for admission, by invitation, to the Association, who were duly elected:—

Dr. Jas. E. Morris, New Iberia, La.; Drs. Wm. H. Watkins, John M. Cullen, Charles H. Kelly, S. R. Hurd, C. J. Bickham, P. B. McKelvey, Wm. G. Austin, J. Bensadon, O. Anfoux, H. D. Schmidt, Fr. Loeber, S. A. Smith, of New Orleans; L. L.

Henry, Henderson McFarland, J. S. Bacon, of Mississippi; Dr. C. Tucker, of Danville, Kentucky; and Drs. Florence O'Donnoghue, and John F. Randolph, of the U. S. A.

A paper on "Canula and the New Mode of Applying Ligatures," was submitted by Dr. P. F. Eve, Tennessee, and was referred to the Section on Surgery.

Dr. J. M. Bush, of Ky., offered the following resolution:—

Resolved, That a committee of five members be appointed by the Chair, to take into consideration the subjects alluded to in the President's address, and report at this meeting.

This resolution having been adopted, the President selected as members of the committee, Dr. Parvin, of Indiana, Chairman; Dr. Toner, of the District of Columbia; Dr. Pollock, of Pennsylvania; Dr. Welch, of Texas; Dr. Seely, of Alabama.

Dr. McPheeters, of Missouri, offered a communication from the Medical Association of that State, in reference to Medical Education.

On motion of Dr. Toner, District of Columbia, it was referred to the Special Committee on that subject.

Dr. Eve offered the minutes of the Medical Society of Tennessee, which was similarly referred.

Dr. Gaillard, of Kentucky, offered the following preamble and resolutions which were referred to the same committee:—

Whereas, The medical teachers of America have, after a trial of twenty-two years, failed to meet satisfactorily and efficiently the requirements of the great body of the profession in regard to medical education; and

Whereas, The condition of the profession is yearly becoming more deplorable, on account of the antagonistic and objectionable policy of medical schools, in making the amount of fees charged, rather than a successful teaching, the basis of competition; and

Whereas, To obtain professionally competent graduates, sound and efficient teachers are indispensably necessary; and

Whereas, Such teachers, to be found throughout the country, cannot be induced to leave their homes, without the assurance of competent remuneration; and

Whereas, Such remuneration can only be obtained by adequate fees charged, unless by a system of low fees the *number* of students be relied upon to make up the inevitable pecuniary deficiency; and

Whereas, Reliance upon numbers of students for this purpose deplorably crowds the already overcrowded professional field, diminishing thereby individual income, judgment, experience, and skill, thereby compelling practitioners to resort to other avocations as a source of supplemental income; and

Whereas, This devotion to other pursuits destroys opportunities for study and improvement, degrading thereby the status and standard of American physicians; and

Whereas, The schools of New England, New York, Pennsylvania, Maryland, Virginia, South Carolina, Georgia, Alabama, Texas, Tennessee, and District of Columbia now charge comparatively remunerative fees; and

Whereas, the low system of fees is charged only in a few of the Middle States, and can with advantage be made to conform to the rate of fees charged elsewhere; and

Whereas, It is as unethical for colleges to underbid each other pecuniarily or for practitioners to do so:

Resolved, That hereafter no medical school in this country, other than those fully endowed, be entitled to representation in this Association, if the amount charged by such schools for a single course of regular lectures be less than $140,00.

Resolved, That all schools charging less than this sum are earnestly requested by this Association to advance their rate of fees to the amount mentioned.

The report of Dr. Lee, of New York, the delegate to the Association of Superintendents of Insane Asylums, was offered, and referred to the Section on Psychology.

The report of Dr. Gross, of Pennsylvania, delegate to Foreign Medical Association, was presented, together with the letter to Dr. Ehrenberg, was read, and referred to the Committee of Publication.

The time having arrived for consideration of the Revision of Plan of Organization, it was, on motion, taken up.

On motion of Dr. Hibberd, the following amendment to the constitution was adopted:—

Add to Article VII. the following:—"*Provided*, However, that when an amendment is properly under consideration, and an amendment is offered thereto, germain to the subject, it shall be in order, and, if adopted, shall have the same standing and force as if proposed at the preceding meeting of the Association."

On motion, the following amendments to the constitution, submitted last year, were adopted:—

II. MEMBERS.

In this section, second paragraph, fourth line, insert after the words "United States" the words "from the army and navy."

In fifth paragraph, third line, insert after the word "member" the words "or whose name shall have been, for non-payment of dues, dropped from the rolls of the same." In fifth line, same paragraph, after the word "sentence," read "or disability." In sixth line, after the word "society," add the following:—"Or shall have paid up all arrears of membership; nor shall any person, not a member and supporter of a local medical society, where such a one exists, be eligible to membership in the American Medical Association."

In seventh paragraph, fifth line, strike out the remainder of sentence after the word "by," and insert the words "at least three of the members present, or three of the absent permanent members." In ninth line, after the word "delegates," add the words "except the right to vote."

In eighth paragraph, fifth line, add after the word "delegates," the words "and comply with the requirements of the by-laws of the Association.

In ninth paragraph, third line, insert after the word "must" the words "exhibit his credentials to the proper committee."

III. MEETINGS.

In first paragraph, third line, strike out after the word "shall" the words "never be the same for any two years in succession, and shall."

After the ninth paragraph insert the following new sentence: —"Corresponding members shall consist of such medical gentlemen, eminent in their profession, residing out of the United States, as the Association shall, from time to time, elect."

IV. OFFICERS.

In first paragraph, third line, after the word "Treasurer," insert the words "and Librarian." In second line, after the word "Secretary," strike out the article "and."

The following amendment was, after much discussion, unanimously rejected:—In the third line, after the word "Librarian," insert the following new sentence:—The President shall be nominated and ballotted for in open convention, and shall be elected only from those who have attended at least five annual meetings of the Association; and if, on the first ballot, no person receives a majority of the votes cast, the second ballot shall be confined to the three highest on the list; should no choice be then made, the candidate lowest on the list shall then be dropped. In the event of a tie on the third or succeeding ballot, the President shall decide by a casting vote."

After eighth paragraph, insert a new paragraph as follows: —"The Librarian shall receive and preserve all the property in books, pamphlets, journals, and manuscripts presented to or acquired by the Association, record their title in a book prepared for the purpose, acknowledge the receipt of the same, and he shall also be a member of the Committee of Publication."

V. STANDING COMMITTEES.

In second paragraph, second line, insert after the word "members" the words "of whom the Assistant-Secretary shall be one."

In third paragraph, first line, strike out the word "and." In second line, after the word "Treasurer," read "and Librarian."

VI. FUNDS AND APPROPRIATIONS.

In first paragraph, fifth line, insert after the word "the" the words "delegates and permanent." In the same line, strike out the word "individual."

VII. PROVISION FOR AMENDMENT.

In the first paragraph, fourth line, strike out the word "members," and insert the word "delegates."

BY-LAWS—III. STANDING COMMITTEES.

In second paragraph, ninth line, strike out all after the word "resolution."

In third paragraph, fourth line, after the word "receive" insert the word "original." In same line, after the word "any," insert the word "medical."

In third paragraph, eleventh line, strike out the word "volunteer," and insert the word "original."

In sixth paragraph, second line, after the word "State," insert "and Territory." In fourth line, strike out the words "our country," and insert the words "their respective States and Territories." In same line, strike out all after the word "and," and insert the words "shall transmit them to the Chairman of this committee, on or before the first of April of each and every year."

V. ASSESSMENTS.

In fourth line, strike out the word "the," and in same line all after the word "expenses" to the end of the sentence.

In second paragraph, first line, strike out all after the word "invitation," and insert the following sentences:—"Permanent members not in attendance will transmit their dues to the Treasurer. Any permanent member who shall fail to pay his annual dues for three successive years, unless absent from the country, shall be dropped from the roll of permanent members."

On motion of Dr. Davis, of Illinois, the amendment was amended as follows:—"After having been notified by the Secretary of the forfeiture of their membership."

The amendment was adopted as amended.

The following were adopted as read:—

VII. DELEGATES TO FOREIGN MEDICAL SOCIETIES.

In first paragraph, fourth line, after the word "Europe," insert the words "or other foreign countries."

X. OF THE PREVIOUS QUESTION.

When the previous question is demanded, it shall take at least twenty members to second it; and when the main question

is put under force of the previous question and negatived, the question shall remain under consideration, the same as if the previous question had not been enforced.

A recess was taken to allow the selection of members of the Committee of Nominations.

On reassembling, the Permanent-Secretary announced the following as the Committee on Nominations:—

New York—J. C. Smith.
Delaware—H. F. Askew.
Pennsylvania—A. M. Pollack.
Kentucky—H. M. Skillman.
Tennessee—J. B. Lindsley.
Mississippi—W. Y. Gadbury.
Alabama—J. Cochran.
Ohio—John Townsend.
Indiana—B. S. Woodworth.
Illinois—T. D. Fitch.
Wisconsin—H. Van Dusen.
Missouri—J. S. Moore.
Michigan—J. B. White.
Georgia—R. D. Arnold.
Louisiana—S. Logan.
Texas—S. M. Welch.
Minnesota—C. N. Hewitt.
Arkansas—R. G. Jennings.
West Virginia—W. J. Bates.
Rhode Island—G. L. Collins.
District of Columbia—L. W. Ritchie.
United States Army—J. J. Woodward.
United States Navy—F. E. Potter.

Dr. Chaille, of Louisiana, submitted a proposition for a common medical nomenclature in the United States, taking as a model an official publication on the subject by the Royal College of Physicians of London, and offered the following resolutions, which were adopted:—

Resolved, That a committee of five be appointed by the Presi-

dent, to report, as soon as practicable, to the present session of this Association, the following:—

1. The propriety of adopting and using its influence to have adopted, by the entire medical profession in the United States, the provisional "Nomenclature of Diseases of the Royal College of Physicians."

2. On the practibility of having this nomenclature published in such manner as may render it easily and cheaply accessible to every member of the profession.

3. To recommend such other practical measures for the action of this Association as may be necessary to introduce this nomenclature into official (military, naval, etc.) and general use.

The Chair appointed the following gentlemen as the committee:—Drs. Woodward, U. S. A., Heustis, of Alabama, F. G. Smith, of Pennsylvania, and Chaille, of Louisiana.

Dr. Cochran, of Alabama, offered the following amendments, which were laid over under the rules:—

1. Section 2, paragraph 1—That the clause "as members by invitation" be stricken out.

2. That the second paragraph be stricken out.

3. That of paragraph fourth, all shall be stricken out except the first sentence.

4. That paragraph seven, of "members by invitation," be stricken out.

The reports of the Committee of Publication and the Treasurer were read, accepted, and referred to the Committee of Publication.

On motion the Committee on Nominations were permitted to retire for consultation.

The special order for 12 o'clock being the Report on Specialists, it was read by the Secretary; and, on motion of Dr. Sayre, the resolutions were adopted, and the report referred to the Committee of Publication.

Dr. L. P. Yandell, Jr., of Kentucky, offered the following, which was adopted:—

Resolved, That private handbills addressed to members of the

medical profession, or by cards in medical journals, calling the attention of professional brethren to themselves as specialists, be declared in violation of the Code of Ethics of the American Medical Association.

The special order for 1 o'clock being the Report on American Medical Library, Dr. Toner, Chairman read the report.

After some discussion, on motion of Dr. Hibberd, of Indiana, the report was accepted.

Dr. Davis, of Illinois, offered the following resolutions:—

Resolved, That the proposition of the Librarian of the Congressional Library be accepted.

Resolved, That a committee of one be appointed, residing at Washington, to render the Librarian of Congress such assistance as the interests of the Association may require.

Adopted.

Report on Medical Education presented, and, on motion of Dr. Hibberd, of Indiana, it was made the special order for 10 o'clock to-morrow.

Report on Prize Essays reported:—

The undersigned, appointed Committee on Prize Essays, at the session of 1868, respectfully report:—

They have received but two essays—one upon "The Physiological Effects and Therapeutical Uses of Atropia and its Salts;" the other upon "Quinine as a Therapeutic Agent." They agree to present both of these essays to the Association, and to recommend the award of a prize of one hundred dollars to each of them.

S. M. Bemiss, Chairman,
C. Beard, M.D.,
Joseph T. Scott, M.D.,
S. A. Smith.

The Secretary broke the seals and announced that Dr. S. S. Herrick, of New Orleans, was the author of the paper on quinine, and Dr. Roberts Bartholow, of Cincinnati, was the author of that on atropia.

On motion of Dr. Davis, the Sections were authorized to meet at 3½ P.M. in place of 3.

Remarks upon certain points referring to success in the operation of vesico-vaginal fistula, by M. Schuppert, M.D., of New Orleans, Louisiana.

Referred to Section on Obstetrics.

Dr. Booth, of Mississippi, offered the following preamble and resolution:—

Resolved, That the proper construction of Art. 4, Sec. 1, Code of Ethics, A. M. A., having been called for, relative to consultation with irregular practitioners, who are graduates of regular schools;

Resolved, That said Art. 4, Sec. 1, Code of Ethics, A. M. A., excludes all such practitioners from recognition by the regular profession.

On motion, the Convention adjourned until Thursday, at 9 A.M.

THIRD DAY'S PROCEEDINGS.

Dr. Baldwin, President, in the Chair. Dr. S. M. Bemiss, and Dr. Mendenhall, Vice-Presidents.

Reading of the minutes was dispensed with.

Dr. Parvin reported from the Committee on President's Address, as follows:—

We cannot refrain, before entering upon the consideration of the plan recommended by the President for the improvement of medical education, gladly expressing our high appreciation of the general tone of his address, of the broad and catholic spirit which pervades it, finding expression in earnest and eloquent words; in brief, we believe the address worthy the perusal of every member of the profession, in that it was worthy the memorable occasion, and is worthy the annals of medicine.

On the other hand, we cannot refrain—with sadness be it said—from acknowledging the truth of the terrible allegations made against the present condition of medical education, and the little success attending the efforts for improvements in such connection, made during a score of years.

The special recommendation made by the President is in these words:—

"I would advise that we appoint a committee of our wisest

and best men, to digest a plan for one or more national medical schools, and to memorialize Congress on behalf of the enterprise. Let the plan embrace as a basis the features presented by the Cincinnati Convention of Teachers; let these schools or universities confer such distinctions and privileges as will be proportionate to the superiority they demand, and such as will make the attainment of their diploma an object of the ambition of those who engage in the study of medicine; let the choice be open to all aspirants, and the appointment or election of professors so guarded as to secure the very highest talent, the most profound learning, with the most fully demonstrated capacity for teaching. Make the salaries of the professors large, and not to depend upon the number of students; and let the Federal Government assume a proper share of the expenses incurred."

Your committee express their hearty approval of this general plan, but suggest that the effort at first should be for the establishment of but a single school, as more feasible; and beside, one such institution would be a model which other medical colleges might in time be induced to imitate in extent, duration, and thoroughness of teaching, in rigidness of requirements for the degree of M.D.

We likewise desire to say that when the details of this general plan are thrown into form, there should be the amplest security against the places and the power of such a medical college as designed ever falling into the hands of politicians, or the proteges of politicians. Medicine is higher than politics—broader than political creeds and party platforms.

In conclusion, your committee reiterate the recommendation of the President as to the appointment of a committee for the special purpose referred to.

Drs. Parvin, Welch, Seely, Toner, and Pollock, committee.

Dr. Hibberd moved acceptance, was adopted, and, on the proposition of Dr. Davis, the committee was ordered to consist of five. The President appointed Dr. N. S. Davis, of Illinois; Dr. F. G. Smith, of Pennsylvania; Dr. D. H. Storer, of Massachusetts; Dr. E. S. Gaillard, of Kentucky; and Dr. Joseph Jones, of Louisiana.

On motion of Dr. Davis, Dr. W. O. Baldwin was added to the Committee.

Dr. Palmer, of Michigan, submitted the following amendments to the by-laws, which were adopted:—

Amend Section 11 of by-laws, by inserting in place of the clause after "6 Psychology," "each section, etc.," these words: —"The President and Secretary of the several Sections shall, like other officers of the Association, be nominated by the Special Committee of one member from each State represented at the meeting, and elected by a vote on general ticket. They shall hold their office until the close of the proper business of the annual meeting next succeeding their election, and until their successors are appointed.

Modify next paragraph appropriate to the several sections; in order to secure consideration and action, must be sent to the Secretary of the appropriate Section, at least one month before the meeting which is to act upon them. It shall be the duty of the Secretary to whom such papers are sent to examine them with care, and, with the advice of his Section, to determine the time and order of their presentation, and give due notice of the same; and after their full examination and discussion by the Section, they shall be sent to the Permanent-Secretary of the Association.

Papers presented directly to the Association, and other matters, may, at the discretion of the Association, be referred to the various sections for their consideration and report.

The President appointed as delegates to the British Medical Association:—

Dr. N. Pinckney, U. S. N.; R. R. McIlvain, Ohio; J. F. Hibberd, Indiana; B. Lindsley, D. C.; G. C. Blackman, Ohio.

To the Canadian Medical Association:—

Dr. Alden March, Albany, N. Y.

To the Committee on Ethics was appointed:—

Dr. Sayre, N. Y.; Toner, D. C.; Askew, Del.; Arnold, Ga.; McCluskey, Ala.

Dr. Hibberd presented handbill put out by Dr. J. B. Buchtil, of Terre Haute, Indiana, and charged irregular practice in this

conduct. Paper was read and referred to the Committee on Ethics.

Dr. Davis presented the following from the Association of American Medical Editors:—

To the American Medical Association:—I have been instructed to announce to your honorable body that those members of your Association in attendance on this annual meeting who are editors of medical periodicals, after proper consultation, have effected a permanent organization with the title of "The Association of American Medical Editors." The objects of this organization are the cultivation of friendly relations, mutual assistance, community of effort and views, where possible, in a system of receiving foreign exchanges, and sending our own journals abroad, concert of action in support of improvements in the present system of medical education, and of a higher standard of preliminary attainments for those who propose to enter upon the study of medicine, in proposing laws for the proper registration of births, marriages, and deaths, in collecting the names of all the regular practitioners in the several states, and in promoting generally the value and efficiency of our periodical medical literature. The Association thus formed is to hold its annual sessions on the day preceding the annual meetings of this body, and in the same localities. Dr. Mitchell, of New Orleans, is the Permanent-Secretary, and Dr. J. B. Lindsley, of Nashville, Tenn., the Assistant-Secretary. Congratulating your honorable body on the establishment of another organized power within the ranks of your noble profession, I remain, yours most truly,

N. S. Davis, *Editor*,
President of Association of American Medical Editors.

Referred to Committee on Publications.

The Secretary presented a paper from Dr. Walsh, of Georgia, referring to the action of the Georgia Medical Society in his case. Referred to Committee on Ethics.

Dr. Gaillard, of Kentucky, explained the Kentucky troubles. No action.

Dr. Parvin read report of Dr. J. C. Reeves, on Medical Edu-

cation, which had been made special order for 10 o'clock A.M. Adopted, and referred to Committee on Publications.

Dr. McPheeters, of Missouri, offered a resolution that no speech should be longer than ten minutes. Adopted.

The Committee on Nominations—Dr. J. J. Woodward, U. S. N., President—reported the following names:—

REPORT OF THE NOMINATING COMMITTEE.

NEW ORLEANS, LA., *May 6th, 1869.*

The Committee on Nominations unanimously report as follows:—

For President—George Mendenhall, Ohio.

For Vice-Presidents—Warren Stone, La.; Lewis A. Sayre, N.Y.; F. Gurney Smith, Penn.; John S. Moore, Mo.

For Assistant-Secretary—Wm. Lee, D. C.

For Treasurer—Caspar Wister, Penn.

For Librarian—Robert Reyburn, D. C.

Committee of Arrangements—Thomas Antisell, Chairman; Robert Reyburn, C. M. Ford, L. W. Ritchie, W. J. C. Duhamel, D. R. Hayner, C. F. Nally.

Committee of Publication—F. Gurney Smith, Pa., Chairman; W. B. Atkinson, Pa.; A. J. Semmes, Ga.; Robt. Reyburn, D. C.; Caspar Wister, Pa.; H. F. Askew, Del.; Wm. Maybury, Pa.

Committee on Medical Literature—J. J. Woodward, U. S. A., Chairman; W. H. Anderson, Ala.; Theophilus Parvin, Ind.; Hosmer A. Johnson, Ill.; C. W. Parsons, R. I.

Committee on Prize Essays—Grafton Tyler, D. C., Chairman; N. R. Lincoln, D. C.; N. R. Smith, Md.; G. W. Miltenberger, Md.; W. R. Dunbar, Md.

Committee on Epidemics—Add the following to fill vacancies: —J. K. Bartlett, Wis.; J. B. Jackson, Ky.

Committee on Education—T. G. Richardson, La., Chairman; E. W. Jenks, Mich.; E. S. Gaillard, Ky.; W. M. McPheeters, Mo.

Time for meeting, in Washington, first Tuesday in May, 1870.

J. J. WOODWARD, U. S. A., *Chairman.*

The report was unanimously adopted.

Dr. Herrick, Louisiana, offered amendment to Code of Ethics, on the duties of physicians to each other and the profession at large.

ART. I. DUTIES FOR THE SUPPORT OF PROFESSIONAL CHARACTER—PROPOSED AMENDMENT—ADDITIONAL SECTION.

SECTION 5. The spirit of trade and of gain from merchandise should by all means be dissociated from the practice of a liberal profession; and it is important that practitioners should not allow their pecuniary interests to compromise their duties to their patients. Therefore, in cities and other communities where the services of competent apothecaries can conveniently be obtained, physicians should resign to them the whole business and profits of dispensing medicines.

Laid over to next yearly session.

Dr. Davis offered a report on various propositions and communications from medical societies, which was adopted and referred to Committee on Publication.

Dr. Davis offered the following:—

Resolved, That a special committee of three be appointed by the President, to present copies of the resolutions adopted, to the several State Medical Societies, at as early a period as possible. Adopted.

The President appointed as such Committee Drs. N. S. Davis, of Ill., J. S. Wetherly, of Ala., and J. M. Toner, of D. C.

Dr. Chaille, of Louisiana, Chairman of committee, presented a report on Medical Nomenclature, which was received and adopted, and referred to Committee on Publication.

The Committee on the Nomenclature of Diseases have the honor to report that it has examined the "Provisional Nomenclature of the Royal College of Physicians," of London, and is of the opinion that it is desirable for this Association to recommend and adopt the same for general use in this country, with such modifications as, on deliberate consideration, may appear to be necessary. The following resolutions are, therefore, submitted:—

1. *Resolved*, that a special committee of fifteen be appointed

by the President to take this subject into deliberate consideration, and to report at the next annual session what alterations, if any, are necessary to adapt the proposed nomenclature to general use in the United States.

2. That this committee be authorized to fill up any vacancies which may occur upon it.

3. That the Committee on Publications be authorized to publish, for general distribution, one thousand copies of the English and Latin portions of this nomenclature, under the designation of the "Proposed Nomenclature," prefacing the same with such remarks as may be deemed necessary to secure the criticism and coöperation of as large a number of the American medical men as practicable.

4. That the committee hereby appointed be directed to draw the attention of the Surgeon-General of the army, of the Chief of Bureau of Medicine and Surgery of the navy, and of the Superintendent of the Census, to the question of their official adoption of the proposed nomenclature; to invite them to appoint whom they see fit to represent them on this committee; and to solicit such coöperation as may be necessary to accomplish the purpose desired, *viz.:* the final adoption of such nomenclature and classification as will receive the conjoint approval of the official medical bureaus of the Government and of the general profession.

Committee—S. E. Chaille, Louisiana; J. J. Woodward, United States Army; A. B. Palmer, Michigan; F. G. Smith, Pennsylvania; J. F. Heustis, Alabama.

The following committee of fifteen was appointed:—

Francis G. Smith, Chairman; J. J. Woodward, U. S. A.; R. F. Michel, Alabama; A. B. Palmer, Michigan; S. E. Chaille, Louisiana; L. P. Yandell, Jr., Kentucky; Austin Flint, New York; Alonzo Clark, New York; Geo. B. Wood, Pennsylvania; S. H. Dickson, Pennsylvania; E. Jarvis, Massachusetts; Theo. Parvin, Indiana; W. M. McPheeters, Missouri; E. M. Snow, Rhode Island; N. Pinkney, U. S. N.

Capt. Neal, of the steamer Richmond, invited the members to take an excursion at 5 P.M.

On motion of Dr. Garrish, of New York, thanks were tendered to Capt. Neal.

Dr. Garrish, New York, offered a vote of thanks to the N. O., J., and G. N. R. R., for agreement to pass members back free. Adopted.

Dr. Gaillard, Kentucky, offered the following, with preliminary remarks:—

Resolved, That the adoption of a uniform rate of collegiate fees—$120 being the minimum—be accepted as the sentiment and desire of this Association.

Dr. Logan, of Alabama, moved to amend by inserting $140.

After considerable discussion, the fees were placed at $120.

Special Committee on the Relative Advantages of Syme's and Pirogoff's mode of Amputating at the Ankle.—Dr. G. A. Otis, U. S. A., Chairman; Dr. J. D. Holloway, of Louisville, Kentucky.

Proposed by J. J. Woodward. Approved.

Dr. Bemiss presented from Dr. John Waters, of St. Louis, Mo., a paper on "The Doctrines of Force—Physical and Vital."

Dr. A. M. Pollock, of Pennsylvania, presented this amendment to the constitution:—

Resolved, That all County Medical Societies shall be required to elect a committee annually, whose duty it shall be to examine all applicants for admission as students under the tuition of its members; and that no member of any county medical society shall receive any such applicant, until such applicant shall present a certificate from said committee, testifying that he has a good English education, and a sufficient knowledge of Greek and Latin to enable him to pursue his studies with advantage.

Laid over under the rules.

Dr. Toner, D. C., moved that a committee on variola be appointed—Dr. Jos. Jones, Chairman. Adopted.

Dr. Pinckney, U. S. N., made statements concerning relative grades of rank. The paper was ordered to be spread on the minutes.

Association adjourned, to meet at 9 o'clock A.M., Friday, May 7th.

FOURTH DAY'S PROCEEDINGS.

The Association met at 9 o'clock, Dr. Baldwin in the Chair.

Reading of the minutes omitted.

In yesterday's report the paragraph which defines the rates of fees in medical colleges is corrected so as to read that "the adoption of a uniform rate of collegiate fees—120 dollars being the minimum—be accepted as the sentiment and desire of the Association."

Dr. Joseph Jones, Louisiana, presented a number of specimens of pathology, anatomy, and natural history. The explanations were very interesting, and received with applause.

On Motion of Dr. Garrish, Kentucky, the thanks of the Association were tendered to Dr. Jones.

The following delegates were appointed to foreign Medical Societies:—

To the Canadian Medical Association:—H. F. Askew, Del.; R. Miller, Alabama; J. M. Bush, Kentucky; N. S. Davis, Ill.; Riggs, Alabama.

To the International Medical Association:—Dr. W. J. C. Duhamel, District of Columbia; Jos. Berney, Alabama; E. L. Jones, New York; B. F. Dawson, New York; Joseph Jones, New Orleans.

To the British Medical Association:—F. A. Ross, Alabama.

Delegate to Association of Superintendent of Insane:—Robert Reyburn, District of Columbia.

On motion of Dr. F. G. Smith, of Pennsylvania, the following resolution was unanimously adopted by a vote of the members present, standing as a mark of respect:—

Resolved, That the thanks of this "Association" are justly due and are hereby tendered to the President for the uniform kindness and courtesy with which he has presided over its deliberations, and to the Committee of Arrangements, the physicians and citizens of New Orleans, for the generous hospitality and fraternal kindness with which we have been received and treated during our sojourn in their city, with the assurance that

the memories of this visit will always be among the brightest and most enduring of our lives.

Resolved, That we also present our thanks to the various railroad and steamboat companies who have so liberally extended to us facilities of transportation, and to the daily press for their efficient aid in reporting the proceedings of this meeting.

On motion of J. P. Moore, of Mississippi, the following preamble and resolutions were adopted:—

Whereas, The contract system is contrary to medical ethics.

Resolved, That all contract physicians, as well as those guilty of bidding for practice, at less rates than those established by a majority of regular graduates of the same locality, be classed as irregular practitioners.

The following reports of the Sections followed:—

Section on Meteorology, Medical Topography, and Epidemics reported.—Paper accepted and referred to Committee on Publications.

Sections on Practical Medicine and Obstetrics reported and were accepted, and referred to Committee on Publications.

And the report on Training of Nurses was accepted, and the resolutions adopted.

Section on Medical Jurisprudence, Hygiene, and Physiology reported. Committee continued for next year. Report accepted, and referred to Committee on Publications.

Section on Surgery proposed that their report be received without formality and be referred to the Committee on Publications. Adopted.

After being read the report was accepted and ordered to be published.

Section on Pscychology, the same disposition.

The President appointed Dr. J. M. Toner a committee of one, at Washington, D. C., to assist the Librarian of Congress to keep the books of the Association.

On motion for adjournment, the President delivered an address, which was unanimously accepted and ordered to be published in the transactions of the Association.

GENTLEMEN:—Before I submit the motion just made, and which, when adopted, will practically close my official relations to this body, allow me to return you my most cordial and grateful thanks for the unvarying kindness which I have received at your hands. Whatever my future lot in life may be, the world holds no honors which to me can equal those conferred by you. The fraternal good-will which has so conspicuously marked your deliberations has been to me a matter of infinite satisfaction and pride, and will not be the least among the grateful memories which will gladden my heart as I may hereafter review the incidents of my official connection with you.

To win your judgment and approval, to hold up the dignity of fellowship, the usefulness of association, and the interest and prosperity of the profession at large have certainly occupied my most anxious thoughts since my elevation to this position; yet to cherish and promote the intimate and cordial relations of friendship between the individual members of this Association against all sectional distinctions or geographical lines, has also been among the chief objects of my ambition, and the earnest desires of my heart. Could I now believe that my efforts have contributed in the slightest degree to enlarging that harmony of sentiment and fraternal feeling which has been so apparent throughout this meeting, I should feel that I had commenced at least to make some return for the great honor and kindness received at your hands.

It now only remains for me, gentlemen, to again express to you my thanks, to wish you a safe return to your homes and labors, a happy reunion with your friends and families, and to pronounce that sad word over which the heart of friendship would fain linger, as I bid you an affectionate *farewell.*

W. O. BALDWIN,
President A. M. A.

The Convention adjourned to meet in Washington, D. C., second Tuesday in May, 1870.

Selections.

TRANSACTIONS OF THE GYNÆCOLOGICAL SOCIETY OF BOSTON.

In accordance with the desire of several medical men of Boston and its vicinity, who had previously consulted upon the subject, a meeting was held on January 22d, 1869, for the purpose of establishing a Gynæcological Society, the first, so far as can be ascertained, of its kind in this country.

The meeting having been organized, Dr. Storer presented the arguments that had influenced the members to found the new Society. They were the following:—

1. That such a Society seems needed, in order to stimulate its members and the profession generally to a deeper sense of the importance of the diseases peculiar to women, and by the combination of individual effort to advance their knowledge of the causation, the pathology, and, still more, of the therapeutics of the lesions.

2. That it would do what can in no sense be just as well effected by other organizations already in existence. What is for everybody's interest is very apt to be done by no one. At a general medical and surgical society, there is not to be expected that intensity and focalization of scientific interest regarding special points which is necessary to advance the confines of a comparatively new science, which term Gynæcology must be confessed already to deserve.

3. That there can be no doubt that the special diseases of women comprise a vast variety of disturbances, direct and reflex, much of which is but partially understood or entirely unknown.

4. That these disturbances are of extreme importance, not merely to the individual sufferer, but with reference to her relations to her family and to society.

5. That their importance, their variety, and their frequency are but partially appreciated by the profession, and still less by the community.

6. That not merely is this statement true of great numbers of imperfectly educated physicians, but it is also true of many gentlemen of acknowledged skill as general practitioners, who have either lacked opportunity to perfect themselves in a knowl-

edge of these diseases, or through an excessive conservatism have hesitated to acknowledge their existence.

7. That the marked advance of gynæcological science and art within the past twenty-five years, gives reasonable promise of a still more rapid progress in time to come.

8. That so far from its being a disgrace to a physician to be interested in uterine diseases, it should rather be considered, if he is known to have been thoroughly educated in general practice, an honor. As with the diseases of special sense, the eye and the ear for instance, the diseases of the throat and the chest, and of the mind, so here, all treatment must rest upon general principles;—and all methods of diagnosis, as all procedures of practice, not upon guesswork, but upon science and common sense.

9. That many of the great improvements that have been made have been American,—as the first successful performance of ovariotomy by McDowell; the suggestion of the rational treatment of vesico-vaginal fistula by Marion Sims; and of flexions of the uterus by Emmet;—American gynæcologists have already secured for the country a preëminent position in the world of science; it is for the members of this and kindred societies to make the position the more permanent.

10. And were there no other reason, the fact that every man owes to woman for her love in his infancy, in his childhood, and in his manhood, a debt that no devotion can ever repay; and when as physicians we reflect that her special diseases are manifold more in number, worse in severity, and more dangerous to physical and mental integrity than any affliction we ourselves are called to suffer, we should offer no less a sacrifice to the other sex than a life's work.

These arguments were commented upon approvingly by the gentlemen present, and it was furthermore decided,

11. That as the diseases of women are in great measure capable of being discovered and demonstrated, the same degree of disgrace should attach to physicians prescribing at random for married women complaining of pelvic symptoms, as to those who would do this in the case of diseases of the throat or eye, or who unjustifiably lengthen a patient's treatment for the sake of a larger fee.

12. That as in attending upon childbed all impurity of thought, and even the mental appreciation of a difference in sex are lost by the physician, and an imputation of them would be resented as an insult by the profession, so the care of uterine disease tends to inspire greater respect in a patient for her at-

tendant, and in him for her. It is untrue to say that high-minded and delicate women instinctively desire to be attended by one of their own sex for these diseases, any more than in confinement, just as it is unquestionably the fact that because of the mental and physical disturbance temporarily induced even by healthy menstruation, women, the best of nurses, are unfitted to practise medicine and surgery, in any of their departments, with as much benefit to their patients or as successfully as men; and,

13. That as it is the duty of every searcher for truth to impart what he may find to his fellow-men, so it is incumbent upon the members of this Society to endeavor in every honorable way to exert an educative and persuasive influence upon the profession at large.

The constitution and by-laws were then adopted. They state the purpose of the society to be the advancement of gynæic science and art, and their due recognition, both in Boston and throughout the country; and recognize as the code of ethics that of the American Medical Association.

Dr. H. B. Storer presented to the Society a masked patient concerning whom he desired advice, the case being one of

OBSTINATE EROTOMANIA.

The history was as follows:—

Age of the patient, 50; American, unmarried, and from the country. Climacteric passed several years since; previous to which time, and subsequently, the general health has been good. At twenty-five, coitus was once indulged in with the overseer of a mill, at which many foreigners were employed; and upon the remembrance of this the patient has lived. The mental and physical condition are both peculiar. There is action and reason—and the question is to decide whether the brain here chiefly affects the genitals, the genitals the brain, or each the other. There has for many years existed a troublesome pruritus, and a constant twitching of the clitoridal region, analogous, apparently, to that of the infra-orbital muscles occasionally noticed. These have been attended by an inordinate longing for the other sex, and a frequent indulgence in masturbation. In addition to these appetites, under the circumstances not at all unusual, there exists a remarkable delusion. The patient thinks that the knowledge of her fault, committed so many years ago, has been communicated backwards and forwards among the Irish throughout the country, so that every man or woman of that nation whom she meets seems by word

or by deed to be taunting her. If she hears an Irishman say to his comrade, "It's very hot to-day," she imagines that he applies the expression to her; if he says that "It's very cold," he is upbraiding her for an indifference that she endeavors in vain to attain. So that every person of the kind whom she meets starts, through her morbid self-consciousness and remorse, the old disordered train of ideas, and these, reflexly and always, kindle the vulval congestion, which almost inevitably culminates in orgasm.

Before the patient consulted Dr. S., her clitoris had been excised at Chicopee; no benefit being obtained. After the employment of every local sedative he could think of, borax, tobacco, morphia in lotion and by hypodermic injection, hydrocyanic acid, acetate of lead, the vapor of chloroform, etc., etc., and a corresponding appeal to antiphrodisiacs, exhibited by the mouth, as bromide of potassium up to an hundred-grain doses, etc., etc., without avail, Dr. Storer quieted the pruritus by superficial vesication with a saturated aqueous solution of carbolic acid. The muscular twitching still remained. There was no clitoris left to excise, even if Dr. S. had believed in the efficacy of Mr. Baker Brown's treatment, which, from its unsuccessful employment at his hands in other cases, he did not. He had resorted to an operation which might be a novel one: by passing, with a curved needle, ligatures beneath the crura clitoridis, and down against the pubic arch, at a distance from each other of nearly half an inch, and allowing these to slough out, he had divided, so far as seemed possible, all nervous communication with the affected part. Relief, however, had been but partial. The actual cautery and cantharidal collodion had each given temporary quiet, but the symptoms returned. The vagina, urethra, and bladder had been carefully examined, but nothing abnormal could be found. The uterus seemed perfectly healthy, as small and supple as in a virgin who had passed the climacteric, and not at all displaced. To make assurance doubly sure, and to get, if possible, a reflex effect, the acid nitrate of mercury was applied without and within the uterine cervix. No clitoridal response of any kind was elicited.

The rectum was searched for ascarides—none were found—some small hemorrhoids were excised, and the sphincter ani ruptured by forcible dilatation, but the twitching continued as badly as ever. The liver was appealed to in vain, and in vain had blisters been put behind the ears. In desperation, Dr. S. had jokingly said to the patient he believed he should have to sew up her vulva closely, and, now, here was the wo-

man daily begging him to do so, or end her misery by putting an end to her existence. He had little doubt, from the history of the case, that the mental disturbance was in part, at any rate, of pelvic causation, however much the local irritation existing at present was dependent upon the former; and he had little faith that the ordinary moral treatment relied upon in insane asylums for female patients would do this woman any good. He had not as yet iced the spine; and was about inserting a seton in the nucha. He was loath to throw the case aside, if there were any reasonable ground of treatment remaining to be tried; he therefore appealed to the society for aid.

Dr. Wheeler, of Chelsea, after carefully examining the case, remarked, that it was certainly a very unusual and interesting one. He had no doubt in his own mind that in very many instances of insanity in women a cure was possible, and could only be obtained by local treatment. In such a case as that now presented, this must necessarily be often empirical; yet, under the circumstances, such was both justifiable and advisable, and should be long persisted in.

Drs. Warner, Bixby, and Dutton had each seen the case with Dr. Storer, and had studied many details of the treatment.

Dr. Field, of Newton Corners, stated that here we had an instance of the conflict so often observed by physicians between what is demanded by deference to public morality, and what seems required for a patient's health. If this woman could go masked as she is at the present moment to a house of prostitution, and spend every night for a fortnight at sexual hard labor, it might prove her salvation; such a course, however, the physician cannot advise. And so with masturbation. In a case like the present, its indulgence may be a means of getting temporary relief from a local fret, whose influence upon the mind, if not thus relieved, might prove more disastrous.

Dr. Sharp suggested the employment of galvanism, especially by faradization, and of an appeal, in succession, to the various regions of the spinal cord. These had not as yet been resorted to; it was possible their use might yet solve the problem.

The Society then adjourned.—*American Jour. of Obstetrics.*

Medical Vacancies in the Regular Army.—At the date of the Surgeon-General's report (October 20th, 1868), there were forty-nine vacancies in the grade of assistant-surgeon.—*The Medical Record.*

REFLEX IRRITATION FROM THE RECTUM AS A CAUSE OF SOME AFFECTIONS OF THE UTERUS.

By J. C. NOTT, M.D., New York.

(Read before the New York Obstetrical Society.)

That dysmenorrhœa, amenorrhœa, menorrhagia, irritable uterus, engorgement of this organ, versions, flexions, prolapse, etc., are occasional results of reflex irritation, emanating from the rectum, will be conceded by the experienced practitioner; but my observation would lead me to believe that such cases are far more common than the profession is generally willing to acknowledge.

I have seen many examples of this kind, and am just now concluding the treatment of two typical cases, which have been under my care for three months. The cases are of equal interest, and either one would serve well to illustrate the positions I shall take; but I select that of Mrs. C., for the reason that Dr. J. Marion Sims saw it with me several times, was much interested in its history, and can vouch for the correctness of my statements.

The subject was a lady from the South, moving in the best society, aged thirty-seven, fair skinned, blue eyes, very handsome and intelligent, the mother of six children, and had lost her husband two years ago. She was robust, her labors had been very easy, and she never had any illness until after an abortion at three months, which occurred about three years ago. I should except hemorrhoids, which had been more or less an annoyance to her ever since the birth of her first child, fourteen years ago.

On the third day after the abortion, she started on a journey of one hundred miles, and was near flooding to death on the way. She apparently recovered well from this, and became robust again, having no trouble about the uterus until within the last twelve months, during which time her hemorrhoids have become worse, and during the same time she has complained a good deal of dysmenorrhœa.

During the summer of 1868, her symptoms gradually became more aggravated, and when I was called to see her about 1st September, she was confined to her room, and had not been out of the house for two months. The symptoms presented to me on full examination were as follows:—

Nervous system much deranged; neuralgic pains in back, in

and around pelvis, face, and neck; no appearance of injection in coats of eye, but photophobia and inability to read; dyspeptic and without appetite; inability to sleep much, principally from pelvic pains.

The *rectum* presented, on examination, three external and two internal hemorrhoids, but no ulcer or fissure was discovered. There was, however, morbid contraction of the sphincter, and the introduction of the finger was very painful, and defecation was excessively so, both during and for an hour or two after the act. She complained also of excessive constipation, and never had a passage without an enema or purgative; but the subsequent history proves that what she termed constipation was the result of the morbid condition of the rectum and spasm of sphincter. The fæces sometimes collected for several days, became very hard and impacted, and doubtless had some agency in producing the displacement of uterus described below. The hemorrhoids bled but little, and her condition was the reverse of anœmia. The tumors all protruded during defecation, and often produced much suffering.

The *uterus* was engorged, everywhere tender to the touch, particularly the fundus, and was strongly anteflexed. She had been suffering for the last twelve months with dysmenorrhœa, and at times very severely. Though flexed, I found the neck abundantly open. By drawing a little upon the os with a tenaculum, so as to straighten the bend, I passed a large sound in so easily as to lead me to believe that the dysmenorrhœa was caused by spasm of internal os, originating in reflex irritation from the rectum. The menstruation was but little disturbed in its quantity, quality, and periodicity. There was no leucorrhœa worth speaking of, but a slight erosion around the os uteri. The sound passed in about three inches, confirming the hypertrophy indicated by the touch.

The left *ovarium* had long been a prominent point of pain, and could be easily felt by bimanual palpation. It was extremely sensitive to the touch, and about double its normal size. It seemed to be so prominent a point of complaint, and our means for combating such affections so unsatisfactory, that Dr. Sims hinted strongly at the experiment of electrolysis.

All attempts at walking aggravated her symptoms, and it seemed that every nerve in and around the pelvis was in a super-sensitive state—pressure, even on the external surface of pubic bones, sometimes could not be borne. Having repeatedly seen similar trains of symptoms caused by diseases of the rectum, I determined, in the first place, to clear the hemorrhoids

out of the way and then stop, take an observation, and see what tack should next be taken. Another reason for beginning here, was the fact that it was really the most prominent point of suffering.

I accordingly removed the external tumors with scissors and ligatured the internal ones. Being exceedingly nervous, she suffered a good deal for thirty-six hours, and I was obliged to give opiates. The ligatures came away in five days, and the case progressed satisfactorily. The first evacuation on the third day was painful, but after this her so-called constipation disappeared, her discharges passed off freely and easily, and she was delighted at being relieved from her accustomed suffering.

As the case was likely to be tedious, and the lady was anxious to return as soon as possible to the South, I proposed a consultation with Dr. Marion Sims, hoping he could aid me in bringing the case to a speedy close. The rectum being relieved, we thought the next indication was the relief of the anteflexion; and I must state in this connection, what I have inadvertently omitted, *viz.*, that she suffered greatly from irritability of the bladder; she frequently had to get up eight or ten times during the night to urinate, and the urine was loaded with mucus (these symptoms I thought at the time were dependent solely on the pressure of the fundus of uterus upon the bladder, but this I now doubt, as both the bladder and uterus symptoms disappeared with irritation of the rectum.) We attempted to rectify the flexion by pessaries—Hodge's closed lever, Graily Hewitt's flexed lever, and the globe pessary were tried in turn, but so sensitive were the parts that we were compelled to abandon them all.

I then, with the hope at least of palliation of pains, fell back on another expedient which answered marvellously well, relieved all the disagreeable sensations, and enabled her at once to get up and take exercise with comfort. The following was the expedient alluded to—a soft, round sponge, about the size of a pullet's egg, was saturated with a solution of morphine and sulphite of soda and inserted into the vagina (℞ sulph. morphine, grs. v.; sulphite soda, ℥ss.; aqua, ℥ j.)

This was worn through the night and directed to be renewed night and morning. When I called about noon the next day, I was delighted, and I may add surprised, to find her walking about the house in high spirits, after a good night's sleep, the first she had had for some time, and entirely free from pain.

The sponge prepared in the same way, and tepid vaginal

washes of salt and water, were continued for a month, during which time she had good nights, the bladder symptoms, the tenderness of the ovarium, the innumerable pelvic pains, the photophobia, the dyspepsia and loss of appetite all disappeared —she not only walked up and down stairs freely, but was out walking in the streets every day through this city and gained strength daily. At the end of a month the sponge was discontinued, the use of salt and water continued, and she has now for ten days more continued well.

It is worthy of especial remark that she has menstruated three times since the hemorrhoids were removed and without the slightest pain, showing clearly, I think, that the dysmenorrhea did not depend on the flexion, but upon the engorgement and spasmodic contraction of the internal os, caused by reflex irritation from the rectum.

The engorgement of the uterus has greatly diminished, but the flexion continues and will probably be permanent.

There is another point in the case of practical interest, that I would beg to fix attention on. She thought, as I did, that the rectum disease was permanently relieved by the removal of the hemorrhoids; but a month after the operation, and a few days before I commenced the use of medicated sponge, she commenced complaining smartly of her old constipation and pain in defecation. On examination I found a small unhealed spot at the seat of one of the piles that had been removed by ligature, and producing all the characteristic symptoms of fissure of the anus. I gave her chloroform, inserted my thumbs into the anus, and so forcibly dilated the sphincter as to feel its fibres distinctly break. Two days after she had a stool without pain and has had none since, now a month.

This is an occurrence I have noticed repeatedly, and particularly in irritable, nervous females. This little ulcer forms at the seat of the pile, produces all the symptoms of fissure, and is relieved by the same treatment.

Now I repeat that this case may be regarded as a typical one of a large class, and I think we may refer all the complications to reflex action emanating from the rectum.

The moral I draw from the above is this: Never treat uterine affections without inquiring minutely into the condition of the rectum. Hemorrhoids, small ulcers, irritability, spasmodic contraction of sphincter, etc., are common causes of affections of the uterus, as well as vaginismus and other affections of the vagina; coccyodynia (a short paper on which I have before presented to the Society, and which appeared in the *American*

Journal of Obstetrics for November, 1868) is another fertile source of reflex irritation.

One word with regard to the use of the morphine and sulphite of soda. The objects in using the sulphite were two—First, it had gained some reputation as an application to inflamed surfaces; second, it is an antiseptic which would prevent the sponge from becoming foul. The indication for the morphine is clear enough, and although this application relieved the sensitive surface and nerves, is it at all probable that relief would have followed, had not the rectum—the fountain of irritation—been relieved? I deemed it important also to use the softest sponge that could be obtained.—*Am. Jour. of Obstetrics.*

Editorial.

Illinois State Medical Society.—The proceedings of the recent annual meeting of this Society must be deferred until the July number of the Examiner.

Meeting of the American Medical Association at New Orleans.—The record of proceedings of the recent annual meeting of this great national organization occupies so much space in the present number that our clinical matter and book notices are both crowded out. And, yet, our readers will get but a very imperfect idea of the work done by the Association during its recent session. Nearly all the scientific part of the work was done in the Sections, where many papers and reports were read and discussed, very much to the pleasure and profit of those in attendance. But of all these, nothing appears in the record of proceedings as published. We notice, also, that many of our cotemporary journals are publishing the record literally as it was reported in the New Orleans daily papers, and are consequently giving currency to some errors, especially in regard to committees. For instance, in several, the President, Dr. W. O. Baldwin, is represented as appointing himself at the head of the Committee on the establishment of "a National Medical College," while, the truth was, that after

he had announced the committee, his own name was added by a special vote of the Association. Again, in another part of the record, they represent the President as *adding to the Committee on Correspondence with Medical Societies*, Drs. Davis, Wetherly, and Toner; while the true reading should be, that the gentlemen named were appointed a committee, charged with the special duty of presenting to the several State medical societies a series of resolutions that had been already adopted by the Association. The recent meeting was one of the most pleasant and profitable that we have attended.

Dr. Baldwin presided with ability, and all the business of the Association was transacted with unusual harmony and facility. The hospitalities received were abundant, and of the most appropriate character. The week of our sojourn in the Crescent City will ever bring to mind only the most pleasant memories.

Association of American Medical Editors.—In the present number of the Examiner, we publish the proceedings taken in the formation of a permanent organization of those connected with the medical press of our country.

The objects of the organization as set forth in the proceedings are important, and, if judiciously pursued, will lead to the most important results.

That mutually advantageous arrangements can be made by associated action, in reference to foreign exchanges, there can be no doubt. That annual meetings will be productive of more unity of action, and, consequently, greater influence, and far greater attention to some topics of permanent importance to the profession, is equally evident. The medical periodical press should be, not merely a medium for the dissemination of knowledge in the various departments of medical science, but it is preëminently the proper and only *efficient* medium through which to reach and influence the general sentiment of the profession, on all questions relating to medical education and medical ethics. It has often been said that many of the medical periodicals are published by and constitute simply the

organs of the faculties of particular medical colleges, and hence they cannot be relied on to expose abuses or to efficiently advocate independent measures of improvement. This may be true in some instances, but association and consort of action will do much to obviate that evil, and develop much more fully individual editorial responsibility and influence. Hence, we hope to meet, next May, in Washington, representatives from every regular medical periodical in our country. In the meantime, let our editorial brethren commence the work at once of discussing candidly, courteously, and thoroughly the all-important topic of medical education, in all its relations. If the honor and usefulness of the profession, as well as the nature of the medical sciences, require a fair degree of preliminary education and mental discipline, on the part of those who commence the study of medicine, let us not only say so, but let us continue to discuss the subject until some practicable method for accomplishing the object is actually adopted. What shall be the standard required? Shall its enforcement be required by the medical colleges, or by the private preceptor, through boards of censors, appointed by the local medical associations? These are the questions. If the lecture terms in our colleges, generally, are too short to permit an adequate course of instruction? if the system of giving heterogeneous instruction on all the branches of medical science and practise, to students in all stages of study in one class, is contrary to the dictates of common sense, and productive of many evils? and if the making of the college diploma a license to practise and a full admission into the profession tends directly and strongly to keep the competition and rivalry among the schools, on the basis of the shortest terms and smallest possible requirements for the degree? let the facts be kept constantly before the whole reading portion of the profession, until a united and enlightened sentiment devises and enforces the proper remedies. That the social status and usefulness of a great profession, embodying the highest attainments in science and the most humane objects, should be injured, year after year, and generation after genera-

tion, by manifest and acknowledged defects in its system of education, is simply puerile.

For us to continue listening to annual addresses of presiding officers of social organizations, whether state or national, and the reports of committees, reciting in glowing colors the defects, absurdities, and practical evils of such system, as we have been doing for twenty years past, without agreeing upon some practical measure of improvement and setting ourselves earnestly about the work of executing them, is to make ourselves the laughing-stock of all intelligent men. The only medium through which the great mass of the profession in all parts of the country can be reached is the medical periodical press. Let those having the editorial management of that press realise their responsibility and act accordingly.

Illinois State Microscopical Society.—A society with this title has been recently organized in this city, under a charter granted by the Legislature of the State. Its meetings thus far have given promise of great usefulness. Dr. W. W. Allport is the President, and James Hankey, Esq., is Corresponding-Secretary. We shall notice some of the doings of this Society more at length hereafter.

MEDICAL LAW.

The State of Minnesota has shown a very commendable example to many of her older sisters in passing a law to protect her people from empiricism and imposition in the practice of medicine and surgery. The bill is so much to the point, and so commendable in its provisions as regards protection of the rights of legitimate medicine, that we give it entire, taking the occasion to commend it to the special attention of all parties concerned:—

Section 1. That it shall be unlawful for any person within the limits of said State, who has not attended at least two full courses of instruction, and graduated at some school of medicine within the United States, or of some foreign country, or who cannot produce a certificate of qualification from some State, district, or county medical society, and is not a person of a good moral character, to practise medicine in any of its departments, or perform any surgical operations for reward or

compensation, or attempt to practise medicine, or prescribe medicines, or perform any surgical operation for reward or compensation, within the said State of Minnesota.

Sec. 2. Any person living in the State of Minnesota, or any person coming into said State, who shall practise medicine, or attempt to practise medicine, in any of its departments, or perform, or attempt to perform, any surgical operation upon any person within the limits of said State, in violation of Sec. 1, of this Act, shall, upon conviction thereof, be fined not less than fifty dollars, nor more than one hundred dollars for such offence; and upon conviction for a second violation of this Act, shall, in addition to the above fine, be imprisoned in the County jail of the County in which such offence shall have been committed, for the term of thirty days; and in no case wherein this Act shall have been violated, shall any person so violating, receive a compensation for services rendered: *Provided*, nothing herein contained shall, in any way, be construed to apply to any person practising dentistry exclusively.

Sec. 3. No person who fails or neglects, on or before the first day of October, 1869, to file, in the office of the Clerk of the District Court of the County in which he resides or keeps his office, a sworn copy of the certificate or diploma of some school or college of medicine, that he has attended at least two full courses and graduated at such school, or a sworn copy of a certificate of qualification of some State, District, or County medical society, shall be permitted in any court of this State to sue for or recover any compensation for his services, advice, or attendance as a physician or surgeon; and the failure to file a sworn copy of such diploma or certificate, as above provided, shall be *prima facie* evidence that he has not attended or graduated at any school of medicine, or received a certificate of qualification from any State, District, or County medical society.

Sec. 4. Any person studying medicine with a preceptor, qualified as in this Act above provided, shall have three years from the commencement of his term of study to comply with the provisions of this Act.

Sec. 5. This Act shall take effect and be in force from and after the first day of October, 1869.

We are indebted to Dr. Samuel Wiley, of St. Paul, Minn., for the above copy of the bill. It was passed March 4th, 1869. —*The Medical Record.*

Note on the Cure of Acute Orchitis in twenty-four hours.—By Furneax Jordan, F.R.S., Surgeon to the Queen's

Hospital, Professor of Surgery at the Queen's College.—It is gratifying to me to know that Mr. Noble Smith has found "most satisfactory" results (*British Medical Journal*, Jan. 30th) from the treatment of acute orchitis which I described at Oxford. May I suggest that still better results may be obtained by using a solution of nitrate of silver and applying it *immediately* the cases present themselves?

In very acute cases, I add a little vesication over the femoral artery of the same side. This is the treatment, as seen in a severe double orchitis treated in my absence, and reported to me by a correct observer, our house-surgeon, Dr. Jolly. A man, aged 30, had intense pain, intolerable tenderness, and great swelling and induration in both testicles, and could not stand upright. The scrotum was covered with a solution of nitrate of silver (two drachms to an ounce); a stripe of vesication was established over the upper halves of both femoral arteries by means of linamentum iodidi; and the testicles supported with cotton-wool. He was well in 24 hours.

The treatment of orchitis is of more than ordinary importance, from the discovery by Dr. Marion Sims that closure of the vas deferens from acute orchitis is a common cause of sterility—often where the blame is laid to the wife.

The return of some urethral discharge is best removed, often in a few days, by maintaining, with iodine, a disc of milder counter irritation, the centre of the disk being the genital organs. On this principle I treat all inflammations of the genito-urinary organs, male and female; adding in the acute form a little vesication on the sheltered position of the femoral arteries.

The above treatment of orchitis is simply an illustration of a new system of treating all inflammatory diseases, and which I constantly adopt in all, with a success proportionately as great as in acute orchitis. A brief sketch of the system appears in the February *Practitioner.—British Med. Jour., and New Orleans Jour. of Medicine.—N. Y. Medical Gazette.*

Creasote in Typhoid Fever.—M. Pécholier, of Montpellier, has recently been conducting a series of interesting researches on the action of creasote in typhoid fever. Conceiving the disease to be one, *totius substantiæ*, depending on certain changes in the blood, caused by the action of an organized ferment, which draws from the blood the materials necessary for its nutrition, and exhales those thrown off by its decomposition, M. Pécholier has been led to employ creasote as an anti-

fermentive agent. Sixty patients at the Hôpital St. Eloi were chosen as the subjects of the experiment. Every day a draught containing three drops of creasote, two of essence of lime, ninety grammes of water, and thirty grammes of orange-flower water was administered to the patients. At the same time, enemata were given, containing from three to five drops of creasote. M. Pécholier states, as the result of his experiments, that creasote employed in weak doses, either in draughts, injections, or in the form of vapor, at the outset of typhoid fever, acts powerfully in diminishing the intensity of the disease, and shortening its duration. M. Pécholier adds that the employment of the remedy as a prophylactic agent in schools, garrisons, hospitals, etc., during epidemics, would be of extreme efficacy.—*Lancet.—N. Y. Med. Gazette.*

Subcutaneous Medication for Syphilis.—Dr. Max Van-Mons has reported in the Brussels Academy five cases of secondary syphilis, with indurated chancres, treated by the subcutaneous injection of calomel. Three of the cases received two or three injections each (quantity not stated), at intervals of about 12 days. At the time of writing, these were nearly or quite cured, after the lapse of 37, 20, 19 days respectively; and the remaining two cases, which had each received one injection, only eight days previously, were notably improved. If this discovery is verified, it will prove one of the most important ever made in regard to the treatment of syphilis.—*Wiener Med. Wochenschrift*, No. 24. D. F. L.—*Med. and Surg. Jour.*

Death of Dr. Alexander H. Stevens.—At a special meeting of the New York Academy of Medicine, held April 2d, 1869, for the purpose of paying a tribute to the memory of the late Alexander H. Stevens, M.D., a series of resolutions were unanimously passed, expressive of the high estimation in which he was held by the members of the Academy, and of their deep sorrow at his departure.—*Boston Med. and Surg. Journal.*

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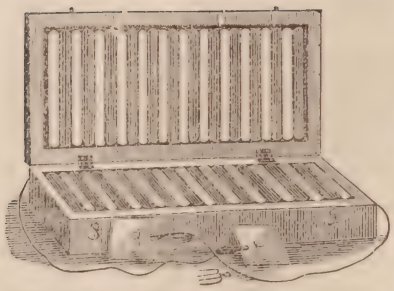

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THE

CHICAGO MEDICAL EXAMINER.

N. S. DAVIS, M.D., EDITOR.

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Original Contributions.

ARTICLE XXV.

TETANUS TREATED SUCCESSFULLY WITH THE CALABAR BEAN.

BY JAMES T. NEWMAN, M.D., Chicago, Ill.

Tetanus, in all ages and in all climes, has been justly termed incurable. But as science is lavishing her golden gifts on other professions, she has not forgotten the department of medicine. The disease that we have now under consideration is an affection of the excito-motor nerves: we have now deduced from pathology a base for therapeutical application. A close analogy exists between the disease and action of strychnia on the nervous centres. Since, then, that we have found that the Calabar bean is antagonistic to the action of strychnia, may we not hope that we can reduce the frightful mortality that always has attended tetanus. While a student, I saw a great many cases of this disorder, but never was called to treat it until about four months ago. You may imagine my feelings when I discovered that tetanus had seized my poor patient.

L. B., a young man, aged 22, was out hunting near Calumet: while in the act of loading his gun, or after it was loaded and capped, his dog, a fine, noble looking beast, sprang up on him; in passing his paws to the ground, they struck the cock, and the contents were immediately lodged in the fore-arm and the

other hand. The right hand was terribly lacerated; all of the metacarpal bones were displaced and broken up. I was called to the case in an hour after the accident happened, and at once came to the conclusion that amputation was absolutely necessary; but I thought it best to give him the benefit of council, and Dr. Wm. H. Horn was sent for, and he agreed with me. We lost no time, but commenced to operate at once. Dr. Horn administered the chloroform: when the patient became fully under the influence of the anæsthetic, I performed the operation, which is of no interest in this place to describe. The left arm received proper attention, and he appeared to be getting along finely. On the morning of the 14th of February, 1869, just eight days after the operation, I was sent for in great haste. I found that tetanus had developed itself. The patient complained of intense pain, extending from the lower joint of the sternum backward to the spine. Chagrined, as I confess I was, I stripped my patient and examined him. I found the sternum and lower ribs powerfully retracted by tonic spasm of the diaphragm, and much tension of the muscles of the neck and jaw. The opisthotonos which was permanent was at times increased by violent clonic spasms of the same muscles. I immediately gave him three drops of Croton oil, and had a fly blister laid on the whole course of the spinal column. As soon as the bowels acted, I prescribed two grains sulphate of morphia every hour. When I visited him again in the evening of the same day, I found the symptoms very much increased in severity. There was a deep hollow at the pit of the stomach, and excruciating pain throughout the diaphragmatic region. The muscles of the neck were perfectly rigid, and those of the back participating in the tetanic spasms. All the joints of the trunk of the body seemed anchylosed, so that when he was removed from the bed he lay in the arms of the attendant like a marble statue. He still referred all his pain to the diaphragm. The abdomen was forcibly thrust forward and was immovable during the respiratory act, which was maintained by the pectoral muscles. *Feb. 15th.* The disease is rapidly coming to a fatal issue—something must be done. His jaws are completely

locked; has voided no urine in the last 24 hours; pulse, 120. I at once took a catheter and removed his urine, and at the same time took one-third of a grain of the ext. of Calabar bean, and dissolved it in 25 drops of water, and injected in the biceps muscle of the right arm. In the course of 30 minutes the spasm subsided; muscles all became relaxed; and he went to sleep for the first time since he was taken. I concluded to take advantage of this relaxation. I administered by the mouth one-third grain of ext. Calabar been, dissolved in a little water. I left him, promising to come back at nine o'clock. I came as per promise, and found him sleeping so soundly that his friend thought probably that he would never wake again. I told them he would soon awaken; accordingly, about 12 o'clock that night, he roused up, and said he wanted something to eat. I ordered two eggs beaten up in two ounces of brandy, and to be taken at once: he drank some beef-tea and went to sleep again. I ordered him a-third of a grain of the ext. Calabar bean, to be given at two o'clock, but he slept so soundly that they neglected to give him the medicine; the result of it was, in the morning he was just as bad as ever. The spasm was more violent, if anything, than ever. This sudden relapse disappointed me, as I thought my patient was out of danger. I accordingly injected in the muscles of the right arm, at the biceps, one-half grain of morphia and one-half grain of the ext. of Calabar bean. In one hour after this, tetanic spasms subsided. I ordered the best nourishments that could be procured, and to be given freely; the injections were continued every two hours. On the evening of the 17th, he became very delirious, and the pulse rose to 140. I laid it to an over-dose of the bean; I ordered it to be discontinued. I saw him again that same evening about 12 o'clock. The poisonous action it seems had passed off. I ordered him two grains of morphia by the mouth every three hours. During the rest of the night, from that time forward, he seemed to get better; but I still continued the use of the bean in one-third grain doses, for two weeks. About the 10th of March the rigidity of the muscles had subsided, and convalescence rapidly ensued.

ARTICLE XXVI.

A NEW DRESSING FOR EQUINO-VARUS.

By N. SENN, M.D., Ashford, Wis.

Having lately treated a case of equino-varus with a new dressing, the like of which I never saw, heard or read of, and having obtained with it a good result, it perhaps merits a few words of description on account of its simplicity.

The patient was a youth, 14 years of age; the deformity having existed for seven years, gradually increasing, until at the time when treatment was commenced he was hardly able to walk across the room without some kind of support. The muscles of the leg, especially the anterior, were extremely atrophied; the heel raised nearly two inches, the foot resting on the outer side of the dorsum and the external malleolus, the toes and foot turned inwards from contraction of the flexor brevis digitorum and fassia plantoris, the astragalus partially dislocated, forming quite a prominence on the anterior aspect of the ankle. While the patient was under the influence of an anæsthetic, I divided at once the tendo achillis, flexor brevis digitorum and fassia plantaris, in the usual manner, then flexed the foot forcibly, so as to bring it back as nearly as possible into the normal position, and placed it upon a posterior splint for the first day. At that time the small openings of the subcutaneous wounds were closed, and as there was hardly any pain or tenderness, I applied at once the following dressing: I had a shoe made just high enough to embrace the heel firmly, lined in front from the toes to the ankle; between the two soles was placed a piece of sheet iron cut in the shape and size of the sole of the foot, projecting in front in a narrow strip, to which could be applied a short strap with a buckle; on the outside of the heel was applied another short strap provided also with a buckle; next, two strips of adhesive plaster, three inches wide above and one below, were applied from just below and in front of the knee, where they met, and of sufficient

length to reach to the upper part of the thigh, supported by circular strips and a bandage; to the lower end of the adhesive strips, two leather straps were attached, punctured by a sufficient number of holes to reach to the buckles in front and on the side. By lacing the shoe firmly, the curving of the foot could be gradually overcome, and a firm hold obtained; with the anterior strap the toes could be raised and the heel depressed; with the outside strap the foot could be turned outwards, thus fulfilling every indication. The straps can be shortened to any extent, so as to bring the foot in any position desired. With this dressing the patient was allowed to walk about on the second day, and never experienced any inconvenience whatever. He has now been under treatment four weeks. The foot is now almost in the normal position, and the muscles of the leg are gaining rapidly in size and strength. This dressing can be made use wherever there is a shoemaker and blacksmith, and with it almost every case of equino-varus can be treated successfully, provided the necessary anatomical obstacles are first removed with the knife.

ARTICLE XXVII.

HYPODERMIC INJECTION IN A CASE OF INERTIA FROM EXHAUSTION.

By. T. G. WILLIAMS, Watertown, Wisconsin.

DEAR EXAMINER:—If you think the following case of sufficient importance, you may record it.

Mrs. J., age 43, mother of several children, passed through her previous confinement naturally and easy. During her last gestation, she had been debilitated greatly, on account of a family trouble. She thinks that she passed beyond the usual time before the labor commenced. *May 9th.* Labor apparently commenced; and an intelligent midwife was in attendance. After two days, not seeing much progress in the case,

the midwife left, with instructions that she be called when necessary. Patient continued a week having troublesome pains at night, with none, scarcely, during the day. During this time she obtained but little sleep. *May 16th: 10 A.M.* Membranes ruptured; an immense quantity of liquor amnii passing off. Powerful pains set in after this, but with no results further than to exhaust the patient. Saw her, 9 P.M., same day, exhausted, having but slight pains. Found right arm down, breech and head to patient's right, and right side of fœtus to patient's left. Fœtal heart seemed weak. Introduced hand for turning. Os well dilated. Found uterus distensible, and fœtus somewhat movable. Owing to inertia, I felt certain that child could not be delivered rapidly enough by the breech, and live, so I tried bringing head down. Returned the arm, and, by pressing shoulder up, succeeded in bringing head down into 3d position; occiput to right acetabulum. Pains increased sufficient to keep it in position, but did not propel it onward in the least. Stimulation seemed only to increase her suffering. No rest possible, owing to pain. Waited from 9.30 P.M. to 1 A.M., and no advance. Patient weak and very restless. Gave hypodermic inj.—morph. sulph, gr. $\frac{1}{6}$. In ten minutes, patient was quiet, and slept considerable during the next half hour. 40 minutes after the inj. was given, pains commenced, and in 20 minutes more, a child weighing 9½ ℔s was born. Head more ossified than natural. Mother did well. No hemorrhage. Two turns of cord drawn tightly about the neck of child, and pulsation nearly ceased. Artificial respiration and other efforts succeeded in restoring life after 30 minutes. During this time it took but one or two gasps of its own accord, and heart action was very weak at times. Both doing well.

CORRECTION.—In my article on "The Bromides," on page 275 of the EXAMINER, third line from the bottom, instead of ℥ss., it should be ʒss.

ARTICLE XXVIII.

REPORT OF COMMITTEE ON DRUGS AND MEDICINES.

READ TO THE ILL. STATE MEDICAL SOCIETY, JUNE 19, 1869.

BY N. S. DAVIS, M.D., etc., Chicago, Ill.

The constitution of the Society requires the Committee on "Drugs and Medicines" to report "on all the improvements and discoveries in Pharmacy and Materia Medica, effected during the year, and on all subjects connected with the sophistication and sale of drugs and medicines."

Two well defined duties are thus enjoined on the Committee. One to examine and report on the merits of such new remedial agents as may have been discovered or brought into notice during the year; and the other to notice the practice of mixing and adulteration of drugs. Following strictly the requirements under the first head we should have very little to report, for it is probable that the actual discoveries and improvements in the list of medicines during the past year have been few.

Still it may be profitable to call your attention to some articles, which if not new have been applied to new purposes, or used in new forms and combinations. For whatever improvements may have been made in Pharmacy during the past year, your Committee would refer members of the Society to the volume of Transactions of the American Pharmaceutical Association, recently published, and to be had in this city from E. H. Sargent, Druggist, corner of State and Randolph streets. It is a volume replete with useful information in reference to Pharmaceutical processes, inferior drugs, adulterations, drug laws and tariffs, etc., etc.

We do not think it proper to copy for re-publication extracts on these topics.

We will touch only on one subject connected with Pharmacy. During the last few years there has been a rapidly increasing tendency on the part of Pharmaceutists to manufacture and

urge upon the public and the profession proprietory compounds, such as Elixirs, Concentrated Powders, Fluid Extracts, etc.

And in the opinion of your Committee the members of the profession have been too ready to adopt and use such preparations in practice. In the opinion of the Chairman of your Committee, this has been a prominent evil.

1st. The use of such compounds, instead of the officinal articles of the Pharmacopœia, destroys all uniformity in use of drugs by different practitioners, and makes it extremely difficult to compare the results of medication in the same forms of disease by different practitioners.

2nd. There is no security for the continued uniformity in the strength of such compounds.

3rd. The use of such proprietory compounds by the profession, gives to manufacturers and druggists greatly increased influence in imposing them on the community as *popular remedies.*

4th. Their use by physicians tends strongly to beget carelessness in prescribing, that is, carelessness in adjusting the exact proportion of each ingrediemt in a compound prescription, to the condition of individual patients.

Having at hand a compound of quinine, strychnine, iron, etc., it makes a strong inducement to give the same to A, B, and C, though, in fact, A needs only one grain of quinine to five of iron, and C needs two of quinine to two of iron. We hold that it is one of the most delicate and important duties of the physician to adjust the proportion of all compound prescriptions to the pathological condition of each patient. And his success in the cure of disease depends as much on his skill in this respect as on his selection of the remedies he shall use.

The true duty of the pharmaceutist and druggist is to furnish the profession with individual articles of the Materia Medica in their purest, most concentrated, and most convenient forms, leaving the physician to combine them to suit each of his patients. In relation to individual new remedies we will only allude briefly to the following:

1. PURIFIED OPIUM—SVAPNIA.

An article bearing the above titles has been brought prominently to the notice of the profession by Dr. J. M. Bigelow, of Detroit; and manufactured by Frederick Stearns, of that city. It is claimed that this article consists of the morphia, narceia, and codeia of the opium, in their natural proportions and combinations; while the thebaine, pappaverine, narcotine, and woody fibre are entirely excluded.

Dr. Bigelow represents it as containing all the anodyne and soporific properties of opium, without the tendency to leave nausea and other unpleasant effects to the same extent as either the opium or morphia. If there is any advantage, however, to be derived from a combination of the morphia, narceia, and codeia, we see no reason why each physician should not combine them in just such proportions as his patient may need.

2. SWEET QUININE.

This is another article prepared by Dr. Bullock from the Peruvian bark, and is represented to possess all the medicinal properties of the sulphate of quinine, without its bitterness. Its chief recommendation is the greater ease of administration, especially to children. It appears to be simply the alkaloid quinia so mixed with the extract of liquorice that when given in water or simple syrup it has comparatively little bitterness. But if mixed with either acids or alkolies its bitterness is fully developed. It may be given for the same purposes, and in the same doses, that we use the sulphate of quinine.

3. CARBOLIC ACID.

The uses of Carbolic Acid as an external and local application are sufficiently familiar to the profession, but its internal administration has attracted but little attention until the past year. From the trials made with it thus far, it would seem that when given in moderate doses it was capable of relieving flatulency, arresting fermentation in the alimentary canal, and correcting offensive secretions. It has also been found to lessen the amount of lithates in the urine. It will probably be found valuable in certain cases of indigestion, and in some stages of typhoid fever and dysentery. As a local application in the form

of spray, it is very valuable in correcting offensiveness of the secretions from the throat and nostrils in diphthentic, catarrhal, and syphilitic inflammations of those parts. One difficulty in prescribing carbolic acid is the uncertain strength of the preparations kept in the drug stores.

The crystals of carbolic acid deliquesce so rapidly when exposed to the air that druggists are often embarrassed in weighing them for use in prescriptions, and there is no recognized solution of uniform strength.

Although the crystals deliquesce rapidly into a liquid, yet water will hold in solution properly only a limited quantity of the acid either before or after deliquescence. It is very desirable that all druggists should keep a true saturated solution of known and uniform strength. Such a solution may be given internally in doses of from four to eight miniums.

4. Peroxide of Hydrogen.

The attention of the profession has been called to the medicinal properties of this article by Dr. B. W. Richardson, of London, and others, in such terms as to justify a passing notice.

It has been administered internally in diabetes and other diseases of debility or general cachexy.

It is supposed to be capable of increasing the amount of active oxygen in the system, and, consequently, promoting the oxydation of the tissues and the rapidity of organic changes.

If this supposition is true, it should constitute an efficient alterative and tonic.

Several cases of diabetes milatus are reported in the medical periodicals as having been cured by its use, and Dr. Richardson proposes it as a substitute for mercury and iodine in the treatment of constitutional forms of syphilis and scrofula. The liquid, as prepared by chemists, may be given in doses of from one to four fluid drachms, repeated three times a day.

5. Ozonic Ether.

This is another article that has been brought into notice during the last few months, chiefly as a remedy for diabetes. It is simply an ethereal solution of the *peroxide of hydrogen,*

and consequently may be used for all the purposes for which that substance is applicable, as stated in the foregoing paragraph. The dose is from ten to thirty minims three or four times a day in water.

6. CASTANEA VESEA—CHESNUT LEAVES.

Dr. Nuziker, of Cincinnati, has recently published the statement that the infusion of the leaves of the Chesnut, drank freely, is capable of mitigating the severity and greatly lessening the duration of hooping-cough. He makes a simple infusion of the leaves, sweetens it with sugar or syrup, and allows the patient to use it as a drink.

It is worthy of further trial.

This list might be further extended, but not with much profit to members of this Society. While we should carefully avoid being seduced by every novelty in the way of new remedies, we should be equally careful to give all such as are based on any reasonable chemical or physiological grounds a fair and patient trial. For information concerning the adulteration, sophistication, etc., of drugs, and a variety of other kindred matters, your Committee would refer to the published Transactions of the American Pharmaceutical Association, which may be had of E. H. Sargent, druggist, of this city.

Proceedings of Societies.

NINETEENTH ANNUAL MEETING OF THE ILLINOIS STATE MEDICAL SOCIETY, COMMENCING MAY 18TH, 1869, IN THE CITY OF CHICAGO.

Delegates and members assembled in the Common Council Room, in City Hall, and were called to order at 10 o'clock A.M., by the President, S. T. Trowbridge, of Decatur.

Dr. R. C. Hamill, Chairman of the Committee of Arrangements, welcomed the members in a neat and appropriate address. The Secretary read the names of the delegates and

members whose credentials had been presented to the Committee of Arrangements, and who were present, as follows:—

Delegates.

Macon County Medical Society.—I. N. Barnes, of Decatur.

McLean County Medical Society.—S. W. Noble, C. R. Parke, of Bloomington; H. Noble, of Heyworth.

Adams County Medical Society.—I. T. Wilson, of Quincy.

Christian Co. Medical Society.—B. F. Barnes, of Taylorville.

Sangamon Co. Medical Society.—H. B. Buck, of Springfield.

Quincy Medical Society.—James H. Reynolds; J. F. McCormick, of Fowler.

Æsculapian Society.—G. W. Albin, of Neoga.

Chicago Medical Society.—G. C. Paoli, J. M. Hutchinson, A. Fisher, P. S. McDonald, J. S. Hildreth, N. T. Quales, A. Groesbeck, H. P. Merriman, S. J. Avery, Lyman Ware, John G. Fredigke, H. Wanzer, I. N. Danforth.

McLean County Medical Society.—John Little, of LeRoy; D. O. Crist, of Bloomington.

Jersey Co. Medical Society.—J. O. Hamilton, of Jerseyville.

Iroquois County Medical Society.—Elias Wenger, of Gilman.

Champagne City Medical Society.—J. T. Pearman, of Champagne.

DeKalb County Medical Society.—H. F. Page, of Sycamore.

Fox River Valley Medical Association.—C. W. Oleson, of Bloomingdale; A. Hard, of Aurora; R. J. Patterson, of Batavia; D. S. Jenks, of Plano.

Military Tract Medical Society.—S. P. Breed, of Princeton.

Champaign County Medical Society.—C. H. Mills, of Champaign City.

Rush Medical College.—Edwin Powell, DeLaskie Miller, of Chicago.

Chicago Medical College.—M. O. Heydock, D. T. Nelson, of Chicago.

Cook County Hospital.—J. P. Ross, R. G. Bogue, of Chicago.

Chicago Eye and Ear Infirmary.—E. L. Holmes, of Chicago.

Permanent Members.

S. T. Trowbridge, of Decatur.

R. C. Hamill, N. S. Davis, E. Ingalls, T. D. Fitch, W. A. Knox, S. A. McWilliams, H. M. Hurd, S. Wickersham, C. T. Fenn, Moses Gunn, J. H. Hollister, H. W. Boyd, R. N. Isham, J. V. Z. Blaney, W. H. Byford, Thos. Bevan, E. O. F. Roler, V. L. Hurlbut, J. Adams Allen, Benj. Durham, of Chicago.

E. Holderness, of Towanda.
D. L. Jewett, of Watseka.
W. R. Fox, of Wilmington.
L. H. Baker, of Quincy.
F. B. Haller, of Vandalia.
E. P. Cook, J. C. Corbus, of Mendota.
A. Niles, of Quincy.
J. P. Matthews, of Carlinville.

On motion, the regular order of business was suspended, for the purpose of electing new members. The following were then proposed in order, and unanimously elected as permanent members:—

W. C. Secrest, of Watseka, Ill.
G. W. Bane, of Macomb, Ill.
D. M. Vosburgh, of Earlville, Ill.
W. M. Burbank, of Barrington, Ill.
E. R. Willard, of Wilmington, Ill.
C. A. W. Zimmerman, of Quincy, Ill.
Peter Epler, of Cayuga, Ill.
John B. Hamilton, of Jerseyville, Ill.

John M. Woodworth, Charles Rutter, S. J. Jones, D. B. Trimble, J. H. Rauch, Wm. C. Lyman, Nelson Loverin, E. Marguerat, Ch. A. Clark, of Chicago, Ill.

R. D. Bradley, of Bloomington, Ill.
Charles Hunt, of Dixon, Ill.
J. R. Corbus, of Amboy, Ill.

On motion of Dr. E. Ingalls, of Chicago, Dr. E. A. Clarke, of St. Louis, Mo., was elected a member, by invitation.

The Secretary then introduced Dr. Hiram Corliss, of Greenwich, Washington Co., New York, as a regularly accredited delegate from the New York State Medical Society. He was

welcomed by the President, and invited to take a seat on the platform, to which he responded in an interesting address.

The reports from Standing Committees being in order, were called for as follows:—

Committee on Surgery—Dr. A. L. McArthur, of Rockford, Chairman. No report.

The Secretary stated that he received a letter from Mrs. McArthur several weeks since, stating that Dr. McA. had been seriously sick; and although his report was partially prepared, he would not be able to finish it, and requested the next member on the Committee to be informed of the fact. This had been done, but he had heard nothing in reply.

Committee on Practical Medicine and Epidemics—Dr. E. P. Cook, of Mendota, Chairman.

Dr. Cook presented his report, which was read at length. Dr. Corliss, of New York, made some remarks in relation to phthisis pulmonalis, expressing his belief in its curability, and encouraging further investigations concerning it.

Dr. E. Ingalls, of Chicago, called attention to the subject of sun-stroke; claiming that its true pathology was *exhaustion*, requiring stimulants, and warm applications to the head.

On motion, the report of Dr. Cook was accepted, and referred to the Committee of Publication.

Committee on Obstetrics—Dr. H. B. Buck, of Springfield, Chairman. The report was made the special order for 2½ o'clock P.M.

Committee on Drugs and Medicines—Dr. N. S. Davis, Chairman. Report, special order for 12 M., of Wednesday.

Dr. J. H. Hollister, Treasurer of the Society, presented the following Annual Report, which was accepted and referred to the Auditing Committee.

The Auditing Committee subsequently reported the accounts and vouchers of the Treasurer correct:—

Treasurer's Report.

The Treasurer of the Illinois State Medical Society herewith submits his Seventh Annual Report, in form as follows, for the year ending May, 1869:—

JOHN H. HOLLISTER, *Treasurer*,
In acc't with ILL. STATE MED. SOCIETY.

1868.	*Dr.*	
May	Balance of cash in Treasury at date,-----	$ 43 39
	Amount of cash received at the Annual Meeting at Quincy, in May, 1868.	
1869.	T. D. Fitch, Treas., P. T.,----------	166 00
May 18.	Am't received by Treasurer in answer to correspondence with absent members to date,----------	45 00
	Making the am't in full,----------	$254 39

Cr.

By cash paid for printing the Annual Transactions for 1868, as per voucher, --------	$169 68	
Cost of correspondence by Treasurer,------	3 00	172 68
Leaving a balance in the Treasury of----		$81 71

It should be stated, that so far as relates to the expense of mailing the Transactions to the members who had paid their dues in advance, it has been made a matter of gratuity, by the generosity of your Permanent-Secretary. The expenditure for the printing of Transactions for 1868 being less than for those of former years, your Treasurer is enabled to report a favorable balance; and, yet, it is believed that an average assessment of $3 per annum, and a very general payment of annual dues, will be needed to maintain the financial credit of the Society.

Respectfully submitted,
J. H. HOLLISTER, *Treasurer.*

The Secretary, in behalf of the Committee of Publication, made the following report, which was accepted and placed on file:—

The undersigned, on behalf of the Committee of Publication, would respectfully report as follows:—As soon after the papers and reports presented at the last meeting of the Society were in possession of the Committee, as possible, they were put to press. Those presented by Dr. E. Powell were not placed in

the hands of the Committee, and, consequently, could not appear in the Transactions. Two hundred copies were printed, and copies sent to all who were reported as having paid the annual assessment, and also to the several medical journals in the country. Near one hundred copies are left, thirty of which are in the hands of the Treasurer, and the balance are in possession of the Permanent-Secretary. The cost of the publication was $169 68, as will appear from the report of the Treasurer.

N. S. Davis, *Permanent-Secretary.*

The list of Special Committees was called, but only the following were responded to:—

Committee on Ophthalmology—Dr. E. L. Holmes, Chairman. Report ready, and made special order for to-morrow, at 11 o'clock A.M.

Committee on Cholera Infantum—Dr. N. Wright, of Chatham, Chairman, reported progress, and asked to be continued. On motion, the Committee was continued to report at next annual meeting.

Committee on Staphyloraphy—Dr. Moses Gunn, of Chicago, Chairman. Report ready, and made the special order for 3 o'clock P.M.

Dr. D. L. Jewett, of Watseka, member of the Committee on Practical Medicine, read a paper as a supplement to the report of the Chairman of that Committee. On motion of Dr. S. W. Noble, the paper was accepted and referred to the Committee of Publication. The Chairman of the Committee of Arrangements read invitations from the Cook County Hospital, the Mercy Hospital, the Marine Hospital, the Chicago Medical College, and the Rush Medical College, to visit those institutions, at such times as the Society might deem proper.

On motion of Dr. F. B. Haller, the invitations were accepted, and the time and order of visiting the several institutions referred to the Committee of Arrangements.

An invitation was extended to all the members of the Society, and their ladies, to attend a reception at the residence of Dr. N. S. Davis, on Wednesday evening.

On motion of Dr. S. W. Noble, the delegates from each county were instructed to select one of their number to act as a member of the Committee on Nominations, and to report the same to the Secretary on the reassembling of the Society at 3 o'clock P.M. Adjourned.

AFTERNOON SESSION.

3 o'clock P.M., Society called to order, the President, Dr. S. T. Trowbridge in the Chair.

The Secretary stated that the following names had been reported as members of the Nominating Committee:—

G. W. Abbin, Cumberland County; A. Niles, Adams Co.; R. G. Bogue, Cook Co.; H. Noble, McLean Co.; W. R. Knox, Will Co.; F. B. Haller, Fayette Co.; J. T. Pearman, Champaign; J. C. Corbus, LaSalle; B. F. Barnes, Christian; J. P. Matthews, Macoupin Co.; G. H. Bane, McDonough Co.; H. F. Page, DeKalb Co.; H. B. Buck, Sangamon Co.; J. N. Barnes, Macon Co.; Elias Wenger, Iroquois Co.; J. O. Hamilton, Jersey Co.; P. Epler, Livingston Co.

Dr. H. B. Buck, of Springfield, Chairman of the Committee on Obstetrics and Diseases of Females, read his report at length.

Dr. Corliss, of New York, remarked that his experience had led him to regard placenta prævia as of very rare occurrence. He also related two cases of inversion of the uterus. The first died from loss of blood, within five minutes after his arrival. In the second case, the womb was returned to its natural position, and the patient recovered. The report of Dr. Buck was accepted and referred to the Committee of Publication.

Dr. N. S. Davis having filled the office of Permanent-Secretary *twelve* years tendered his resignation.

On motion of Dr. H. Noble, the resignation was accepted, and the thanks of the Society unanimously tendered to Dr. Davis, for the faithful manner in which he had so long discharged the duties of his office.

Dr. Hamill, Chairman of the Committee of Arrangements, announced that Dr. E. A. Clarke, of St. Louis, Mo., would exhibit to the Society, at 9 o'clock A.M., models of his improved apparatus for dressing fractures of the extremities, etc.

Dr. Hurd, of Galesburg, stated that he had nearly completed his special report on Aphasia, when his work was interrupted by sickness.

On motion of Dr. T. D. Fitch, Dr. Hurd was requested to complete his report and transmit it to the Committee of Publication.

Dr. Moses Gunn read his report on Staphyloraphy, in which the surgical operations hitherto performed for the closure of cleft-palate were described, and the benefits resulting therefrom impartially considered. The chief benefit to be derived from an operation in these cases is the improvement of speech. And in this respect the writer thought the amount of benefit resulting in the majority of cases was very small; so small, indeed, as to render the operation one of doubtful propriety.

Dr. Corliss mentioned a case operated on by Dr. G. Buck, of New York, and presented before the New York State Medical Society, in which the speech was restored very perfectly, with the aid of an instrument fitted by Dr. Kingsbury, a dentist of that city.

Dr. Fitch stated that a paper had been read on this subject at the recent meeting of the American Medical Association, by Dr. Whitehead, of New York; and the conclusions arrived at in reference to the benefits resulting from surgical operations were similar to those in the report just read.

Dr. Davis suggested that the improvement in speech made in the case presented by Dr. Buck was owing to the dental instrument, and not to the surgical operation performed by Dr. Buck.

On motion, the report of Dr. Gunn was accepted and referred to the Committee of Publication.

Dr. J. S. Hildreth, of Chicago, read a paper on the means for improving the results of the operations for cataract. After some remarks from Dr. E. Powell, the paper of Dr. Hildreth was referred to the Committee of Publication.

A resolution from the McLean County Medical Society was read, inviting the State Society to hold its next annual meeting at Bloomington. It was referred to Committee on Nominations.

Dr. J. O. Hamilton, of Jerseyville, exhibited a specimen of calcarious matter, from the uterine surface of a placenta. Dr. G. W. Albin, of Neoga, presented a malformed female fœtus, with a slender projection from the forehead, somewhat resembling a penis.

On motion, the Society adjourned until 9 o'clock A.M.

WEDNESDAY, JUNE 19TH, 1869—SECOND DAY.

The Society was called to order by the President, at 9 o'clock A.M. The reading of the minutes was dispensed with, and the special order for the morning taken up.

Dr. E. A. Clarke, of St. Louis, presented his apparatus for the treatment of fractures of the upper and lower extremities and of the lower jaw, and gave an interesting account of their application. Dr. Corliss made some remarks in regard to the advantage of having surgical appliances simple as possible in their construction, and strongly commended the use of starch bandages in the treatment of fractures.

On motion of Dr. Hamill, a vote of thanks was given to Dr. E. A. Clarke, for the exhibition of his apparatus.

Dr. A. Van Dyke, of Oswego, New York, was introduced to the Society by Dr. Corliss, and was elected a member by invitation.

The Committee on Nominations, through the Secretary, made a report.

Dr. J. C. Corbus, of Mendota, moved that the report of the Committee be amended, by striking out Bloomington and inserting Dixon, as the next place of meeting. After some discussion, in which Drs. Corbus, Hunt, of Dixon, Cook, H. Noble took part, the amendment was carried by a vote of ayes 16, noes 15. The report of the Committee was then referred back for attention of the Committee of Arrangements and Assistant-Secretary. It was again reported and adopted as follows:—

Chicago, Ill., 18th May, 1869.

The Committee on Nominations met and organized by electing Dr. H. Noble, Chairman, and Dr. J. O. Hamilton, Secretary.

Proceeded to put in nomination for the ensuing year the following named officers:—

President—Prof. J. V. Z. Blaney, of Chicago.

1st Vice-President—Dr. G. W. Albin, of Neoga.

2d Vice-President—Dr. H. B. Buck, of Springfield.

For Treasurer—Dr. J. H. Hollister, of Chicago.

Permanent-Secretary—Dr. T. D. Fitch, of Chicago.

Assistant-Secretary—Dr. Charles Hunt, of Dixon.

Place of Meeting—Dixon.

The following Committees were nominated:—

On the Practice of Medicine—Drs. C. Goodbrake, of Clinton; James S. Whitmire, of Matamora; and Ira Barnes, of Decatur.

On Surgery—Drs. Moses Gunn, of Chicago; G. R. Bibb, of Jacksonville; and John B. Hamilton, of Jerseyville.

On Obstetrics—Drs. Elias Wenger, of Gillman; J. T. Pearman, of Champaign; and S. P. Breed, of Princeton.

On Drugs and Medicines—Drs. Charles Hunt, of Dixon; C. R. Parke, of Bloomington; and T. G. Hickman, of Vandalia.

On Necrology—Drs. J. H. Hollister, of Chicago; F. B. Haller, of Vandalia; and J. O. Hamilton, of Jerseyville.

Special Committees:—

On Criminal Abortions—Drs. DeLaskie Miller, of Chicago; W. H. Byford, of Chicago; and H. Noble, of Bloomington.

On Ophthalmology—Drs. J. S. Hildreth, of Chicago; E. L. Holmes, of Chicago; and S. J. Jones, of Chicago.

On Pulmonary Tuberculosis—Drs. J. P. Ross, of Chicago; J. N. Niglas, of Peoria; and T. D. Washburn, of Hillsboro.

On the use of Plaster-Paris in Fractures—Dr. R. G. Bogue, of Chicago.

On Otology—Drs. Samuel J. Jones, of Chicago; J. R. Corbus, of Amboy; and J. S. Hildreth, of Chicago.

On Arrangements—Drs. Everett, Phillips, Hunt, of Dixon; J. C. Corbus, of Amboy; and E. P. Cook, of Mendota.

H. Noble, *Chairman.*

J. O. Hamilton, *Secretary.*

On motion, a vote of thanks was tendered to the McLean Co.

Medical Society for its invitation to hold the next Annual Meeting in Bloomington.

Dr. Edwin Powell, of Chicago, presented a special report on Lithotomy, giving only a verbal synopsis. After some remarks by Dr. E. A. Clarke, and others, the report was referred to the Committee of publication.

Dr. N. S. Davis, of Chicago, read the report from the Standing Committee on Drugs and Medicines.

Dr. J. V. Z. Blaney remarked that the Peroxide of Hydrogen acted on the animal organization by super-oxydation of all the tissues. He explained the distinction between the Ozonized or active Oxygen, and the Beta or passive Oxygen. He further suggested that the Permanganate of Potassa in solution possessed all the medicinal properties of the Peroxide Hydrogen, and was accessible to the whole profession.

Dr. Davis suggested that the Potassa in the Permanganate might be objectionable in some aplastic conditions of the system. Dr. Blaney replied that the addition of a few drops of Nitric Acid to the solution would obviate any objection of that kind.

Dr. E. Ingalls, of Chicago, stated that he had used the Permanganate of Potassa with great benefit in bad cases of Diphtheritic deposits in the throat and air-passages.

Dr. M. O. Heydock, of Chicago, stated that of all the cases of Diabetes treated with Permanganate of Potassa and Peroxide Hydrogen, only one to two appear to have been really successful. He had used the Permanganate of Potassa in Diphtheria with only indifferent success. Had used a solution of from three to four grains to the ounce of water, as a douche in nasal catarrh with offensive discharge, with much benefit.

On motion the report was referred to the Committee of Publication.

Dr. E. L. Holmes, Chairman of the Committee on Ophthalmology, presented and read his report, which was refered to the Committee of Publication.

On motion the Society adjourned until nine o'clock, A.M., the afternoon to be spent in visiting the Hospitals and Colleges.

At half-past two o'clock P.M., the Members of the Society,

under the direction of Drs. Hamill and Davis, took the street cars for the County Hospital. They were received and conducted through that institution by Drs. Fitch, Bevan, and Hildreth, of the Hospital Staff. They next made a short visit to the Chicago Medical College, where they were received and conducted through the Institution by N. S. Davis, President of the College. At four o'clock they arrived at the Hospital of the Sisters of Mercy, where they were received by Drs. Andrews and Davis, and after examining the different wards they were conducted into the reception room, where the sisters had unexpectedly provided a generous collation. After having done ample justice to this, and given a vote of thanks in return, they again entered the street cars and proceeded to the Marine Hospital, where they were cordially received by Dr. E. C. Rogers and his Assistants. From thence they proceeded to the Rush Medical College, and were kindly shown through its halls by Dr. E. Ingalls. This closed the work of the afternoon.

In the evening, the Members of the Society and a few invited guests, enjoyed a very pleasant social entertainment at the residence of Dr. N. S. Davis.

THURSDAY MORNING—THIRD DAY.

The Society was called to order at nine o'clock A.M., by the President. The reading of the minutes by the Secretary was dispensed with.

Dr. E. Ingalls exhibited an instrument for returning the *funis* when prolapsed and retaining it until the labor is sufficiently advanced. He also read a report on *Lenient Medication*, or Conservatism in Medicine.

The report was received and referred to the Committee of Publication.

Dr. J. H. Hollister, Chairman of the Committee on Necrology, read a report embracing a biographical sketch of the late Prof. Wm. B. Herrick, one of the founders of this Society. The report was accepted and referred to the Committee of Publication.

Dr. E. Andrews, of Chicago, read a short report on the value

of mixing Oxygen with Nitrous Oxide for inhalation as an anæsthetic. He gave the results of several experiments tending to establish the fact that the addition of a small proportion of Oxygen to Nitrous Oxide rendered it less dangerous for protracted use, and yet did not prevent it from producing complete anæsthesia.

Dr. T. D. Fitch discussed the comparative danger from the use of Chloroform and Ether; expressing the opinion that the latter was very little less dangerous than the former.

Dr. Andrews thought the danger from inhalation of Ether only one tenth that from Chloroform.

Dr. E. Powell stated the fact that a few years since he saw the Ether administered to a patient in the Hospital at Boston, Massachusetts, who died directly from the effects of the inhalation.

Dr. B. Durham mentioned the case of a lady who inhaled Ether several months since, and is still suffering severe cerebral symptoms in consequence.

Dr. J. S. Hildreth stated that the inhalation of absolutely pure Ether was quite safe, but many of the samples found in the drug stores were unfit to use.

Dr. Moses Gunn thought the gases had not yet been tested sufficiently, and that we must, at present, choose between the Chloroform and Ether as anæsthetics for surgical purposes. Until within the last six months he had used Chloroform almost exclusively, but had been finally induced to give Ether the preference on account of its greater safety and more stimulating qualities.

Dr. J. H. Hollister thought a mixture of two parts Ether and one Chloroform preferable to either alone.

Dr. J. S. Jones coincided with Dr. Hollister.

Dr. J. V. Z. Blaney stated that he had examined many specimens of Ether from the best drug houses here, and such as is being used for inhalation. The best specimens contained only from 60 to 70 per cent of pure Ether. The specimens of Chloroform were more nearly pure.

Dr. E. Ingalls thought the paper of Dr. Andrews calculated

to produce unnecessary fears by placing the ratio of deaths from Chloroform too high.

Dr. Bane related a case of death from Chloroform that he saw under the care of Dr. F. H. Hamilton, of New York.

The paper of Dr. E. Andrews was referred to the Committee of Publication.

The report of Dr. R. J. Patterson, Chairman of the Committee on Insanity, was received and read by the Secretary, and referred to the Committee of Publication.

Dr. E. Ingalls offered the following resolution, which was unanimously adopted—

Resolved, That in the opinion of the Members of this Society the Legislation recommended by the Committee on Insanity is judicious.

On motion of Dr. Blaney, a Committee of three was appointed to memorialize the next Legislature in favor of the passage of the law recommended in the report and endorsed by the foregoing resolution.

The President appointed as such Committee Drs. R. J. Patterson, of Batavia, E. Ingalls, of Chicago, and H. H. Roman, of Springfield,

Dr. Corliss, the delegate from the New York State Medical Society, in taking leave of the Society made some appropriate remarks.

Dr. E. Ingalls responded, and offered a vote of thanks to the New York State Society for sending a delegate to meet with us, which was unanimously adopted.

On motion, Dr. W. C. Lyman, of Chicago, was appointed a Special Committee on Laryngoscopy.

Dr. T. D. Fitch called up the amendments to the constitution of the Society proposed by him at the last annual meeting, and printed in the transactions for 1868.

On motion, the first section as printed was unanimously adopted as an additional clause to the present constitution.

The second section being under consideration, Dr. E. Ingalls moved to strike out all relating to Membership of Local Societies. The motion led to a discussion, which was par-

ticipated in by Drs. Ingalis, Hollister, Fenn, Fitch, Davis, Blaney, Haller, Hildreth, and Miller.

Dr. Hildreth called for a division of the question, but on motion the second and third clauses of the proposed amendments were laid on the table until the next Annual Meeting of the Society.

Dr. N. S. Davis, from the Special Committee appointed for that purpose, laid before the Society the following communication from the American Medical Association:—

"Dr. Davis, Chairman of the Committee on Various Propositions and Communications from Medical Societies, etc., offered the following report. The resolutions were adopted and referred to the Committee of Publication:—

Report of the Committee on Various Propositions and Communications from Medical Societies, etc.

After a fair examination of the various propositions concerning medical education, medical legislation, and ethical regulations for medical colleges, referred to your committee, we respectfully submit the following report:—

Whereas, The history of medical legislation in the various States of this Union, clearly shows that no reliance can be placed on either the uniformity or the permanency of any laws relating to the practice of medicine; and

Whereas, The results of all the efforts made during the last twenty-five years, to elevate the standard of medical education through concert of action among the numerous medical colleges of this country, have proved with equal clearness that such concert of action in an efficient manner is unattainable, therefore be it

Resolved, That whatever is done to establish and maintain a just and fair standard of medical education throughout our whole country, must be done by the profession itself, through its own voluntary organizations, in the same manner that it now establishes and enforces its code of ethics. The profession is as competent to declare, through its representatives in the national, state, and local societies, what shall be the standard

of attainments for those to be recognized and admitted into its ranks, and to establish the boards or agencies by which compliance with such standard shall be ascertained, as it is to declare what shall be the ethical rules governing the conduct of those already admitted.

Resolved, That this Association earnestly requests each State Medical Society to appoint annually one or more Boards of Examiners, composed of five thoroughly competent members, whose duty it shall be to meet at suitable times and places, for the examination of all persons, whether graduates of colleges or not, who propose to enter upon the practice of medicine in their respective States, except such as have been previously examined and licensed by a similar Board in some other State.

Resolved, That each State Medical Society be requested to make such regulations concerning the pay of the Boards of Examiners, and the fee to be charged for a license to practise, that the former shall in no case depend on the amount received from the latter.

Resolved, That each State Medical Society be requested to require its Examining Board or Boards to exact of every applicant for examination, adequate proof that he has a proper general education; is twenty-one years of age, and has pursued the study of medicine three full years, one-half of which time shall have been in some regularly organized Medical College, whose curriculum embraces adequate facilities for didactic, demonstrative, and hospital clinical instruction.

Resolved, That each State Medical Society be requested to act on the foregoing propositions at the next regular annual meeting after the reception of copies of the same, and if approved and adopted by the State Medical Societies of two-thirds of the States, this Association shall deny representatives from all organizations who longer refuse to comply with the same, and shall recommend the State Societies to do the same, and all persons who, after that date, seek to enter upon the practise of medicine without first receiving a license from State Board of Examiners, shall be treated ethically as irregular practitioners.

Resolved, That in adopting the foregoing resolutions, by

which it is proposed to treat the medical college diploma the same as the diploma of any literary college, this Association is actuated by no desire to injure the medical schools of our country. On the contrary, by the adoption of the fourth resolution at the same time that the value of the mere college diploma is practically nullified, it is the desire, and confident expectation, that those institutions will be greatly benefited; because they will be forced to rival each other in the extent and efficiency of their courses of instruction, instead of the number of diplomas which they can annually distribute.

All of which is respectfully submitted.

N. S. DAVIS,
PAUL F. EVE,
E. S. GAILLARD,
E. LEE JONES,
J. K. BARTLETT.

On motion of Dr. Davis, it was

Resolved, That a special committee of three be appointed by the President to present copies of the resolutions adopted before the several State Medical Societies at as early a period as possible.

Committee—Dr. Davis, Illinois; J. S. Weatherly, Alabama; J. M. Toner, District of Columbia."

After the communication had been read, owing to the importance of the subject and the nearness of the hour of final adjournment, it was moved that the preamble and resolutions be referred to a Special Committee of three, with instructions to report at the next Annual Meeting of this Society. The motion was adopted, and the President appointed as such Committee Drs. N. S. Davis, of Chicago, David Prince, of Jacksonville, and S. W. Noble, of Bloomington.

Dr. J. S. Hildreth offered the following resolution as an addition to the bye-laws of the Society:—

Resolved, That it shall be the duty of the Chairman of every Committee of this Society to invite all other Members of his Committee, at least three months before the next Annual Meeting of the Society, to contribute to the report to be made by

the Committee. And further, he shall submit the report to all other Members of the Committee who have signified a desire to take part in the same, for their action.

The resolution was adopted.

The Society then proceeded to elect delegates to various Medical Societies.

Delegates to the American Medical Association—N. S. Davis, Chicago; F. B. Haller, Vandalia; DeLaskie Miller, Chicago; H. Noble, Heyworth; Benj. Durham, Chicago; Dr. Vosbury, Earlville; James H. Reynolds, Payson, Adams Co.; S. P. Breed, Princeton; D. L. Jewett, Watseka; R. J. Patterson, Batavia; J. O. Hamilton, Jerseyville; D. S. Jenks, Plano, Kendal Co.; M. C. Lyman, Chicago; J. V. Z. Blaney, Chicago; Samuel J. Jones, Chicago; T. D. Fitch, Chicago; A. H. Luce, Bloomington; H. B. Buck, Springfield; Oliver Everett, Dixon; G. W. Albin, Neoga.

Delegates to New York State Medical Society—R. C. Hamill, Chicago; Dr. Thomas, Chicago.

California State Medical Society—Drs. E. Ingalls, Chicago; S. J. Jones, Chicago.

Missouri State Medical Society—J. O. Hamilton, Jerseyville; F. B. Haller, Vandalia.

Michigan State Medical Society—Moses Gunn, Chicago; E. Andrews, Chicago.

Wisconsin State Medical Society—J. H. Rauch, Chicago; Wm. C. Lyman, Chicago.

Indiana State Medical Society—E. P. Cook, Mendota, Ill.; Wm. M. Chambers, Charleston.

Iowa State Medical Society—H. M. Hurd, Galesburg, Ill.

Dr. N. S. Davis offered the following resolutions, which were unanimously adopted:—

Resolved, That the thanks of the State Medical Society are hereby tendered to the Mayor and Common Council of the city of Chicago for the free use of the Council Chamber for the present Annual Meetings of the Society.

Resolved, That the thanks of this Society are cordially tendered to the Committee of Arrangements for the judicious

provisions they have made for the accommodation of the Society.

Resolved, That the thanks of this Society are hereby tendered to our retiring President for the able and efficient manner in which he has performed his official duties.

Dr. J. H. Hollister moved a vote of thanks to the several Colleges, Hospitals, and other Institutions from which this Society had received invitations and professional courtesies, which motion was adopted.

On motion the thanks of the Society were tendered to Dr. N. S. Davis and Lady for the very pleasant entertainment enjoyed at their residence on Wednesday evening.

The following were appointed a Board of Censors for the ensuing year:—Drs. E. P. Cook, of Mendota; J. O. Hamilton, of Jerseyville; S. P. Breed, of Princeton; N. Wright, of Chatham; and E. Powell, of Chicago.

On motion the Society adjourned *sine die*.

CHICAGO COLLEGE OF PHARMACY.

Special Meeting—New Members—Honorary Members—Election of Delegates.

A special meeting of the Chicago College of Pharmacy was held at their rooms, in Rice's Building, on the afternoon of the 24th June,—the President, E. H. Sargent, in the chair.

The proceedings of the previous meeting were read and approved.

The minutes of the meeting of the Board of Trustees were also read and approved.

The following new members were elected—James E. Marshall, Centralia, Ill.; George F. Layton, South Bend, Ind.; John C. Evans, New Albany, Ind.; F. M. Goodman, Ph. T. Hines, Edward Vincant, K. A. Hunter, Homer A. Smith, H. T. Patterson, Fred C. Webber, George C. Cunningham, Chicago.

The following foreign honorary members were, after discussion, elected—Dr. J. Attfield, Dr. T. Redwood, Henry

Deane, Daniel Hamburg, London, England; Henry B. Brady, Newcastle-on-Tyne, England; Dr. G. C. Wittsteing, Munich, Bavaria; Dr. H. Hager, Berlin, Prussia; Dr. Frederick Mohr, Bonn, Prussia; Dr. F. A. Fluckiger, Berne, Switzerland; Augustus Ambroise Delandre, Messrs. Robinet and Boullay, Paris; Dr. Arthur Casselmann, St. Petersburg, Russia; Dr. G. Dragendorff, Darpet, Russia.

Edward T. Schloetzer was elected a trustee of the college, to fill a vancancy occasioned by the absence from the city of Louis A. Diehl.

The following gentlemen were elected as delegates to represent the College at the Convention of American Pharmaceutical Association, to be held in this city on the 7th of September next—Albert E. Ehert, F. Mahla, James W. Mill, George M. Hambright, Thomas Whitfield.

The following delegates were appointed to represent the College at the Convention to Revise the National Pharmacopœia, to be held in Washington in May, 1870—Messrs. Albert E. Ebert, Henry Biroth, C. Louis Diehl. Alternates—James W. Mill, F. Mahla, Louis Strehl.

The meeting then adjourned.

IOWA STATE MEDICAL SOCIETY.

SYNOPSIS OF THE PROCEEDINGS OF THE SEVENTEENTH ANNUAL MEETING.

WEDNESDAY, *May 26th, 1869.*

The Iowa State Medical Society convened in the Hall of Good Templars, in the City of Des Moines, as per adjournment. The President, Dr. Philip Harvey, of Burlington, in the Chair. Prayer was offered by Rev. H. S. DeForest, who was present by invitation.

The minutes of the last annual meeting were read and approved.

Members present were Drs. J. C. Hughes, A. M. Carpenter, H. T. Cleaver, Keokuk; T. J. Caldwell, Adel; N. S. Smith,

Belle Plaine; Wm. Cornes, Tama City; Jas. Gambie, LeClaire; N. Steel, Fairfield; J. Williamson, S. B. Thrall, Ottumwa; W. F. Peck, E. H. Hazen, Davenport; H. L. Whitman, C. H. Rawson, J. O. Skinner, D. V. Cole, W. H. Ward, A. G. Field, Des Moines; J. W. Gustene, Panora; F. Loyd, Iowa City.

The President stated that the address which he had prepared was of a popular kind, and it had been suggested that it be delivered to a popular audience.

Dr. Hughes moved that the address be deferred until evening, and that a committee be appointed to procure a suitable room and give due notice.

After some discussion, the motion was amended so as to make the Hall of the Good Templars the place, and 2 o'clock P.M. the time, for the delivery of the address, and that all interested be cordially invited to be present; in which form the motion was unanimously adopted.

On motion, a committee of five was appointed to nominate officers for the ensuing year, consisting of Drs. W. F. Peck, E. H. Hazen, C. H. Rawson, N. Steel, A. M. Carpenter.

After some further discussion of topics relating to the business of the meeting, the Society, on motion, adjourned to meet at 2 P.M.

AFTERNOON SESSION.

The Society convened as per adjournment, the President in the Chair.

The annual address being in order, the President proceeded to deliver a carefully prepared and instructive address on the subject of "Climateology of Southern Iowa;" contrasting the climate of Iowa with that of other portions of the earth's surface, and furnishing explanations for some of the advantageous characteristics of this climate.

On motion of Dr. Field, a vote of thanks was tendered to Dr. Harvey for his very interesting and instructive address. Carried unanimously.

The Secretary was instructed to furnish to each of the daily papers published in this city a brief synopsis of the proceedings, such as might be of public interest.

The Editor of *The State Register* being present, requested, through the Secretary, a copy of the President's address for publication.

Dr. J. C. Hughes moved that the address be referred to the Publishing Committee, with permission to grant the request. Carried.

Dr. Steel, of Fairfield, read a report of a case of ascites, and operation for, which was received and referred to the Committee on Publication.

Drs. Peck and Hughes reported other interesting cases, which were followed by remarks by Drs. Carpenter, Hazen, Thrall, Harvey, and others. Reports received and referred to Committee on Publication.

The Board of Censors reported favorably upon the following named applicants for membership of the Society:—

Dr. J. F. Kennedy, Tipton; graduate of University of New York, 1858.

Dr. R. W. Pryce, Iowa City; Jefferson Medical College, Philadelphia, 1858.

Dr. John Bower, Guthrie Centre; Pennsylvania Medical College, Philadelphia, 1848.

Dr. George F. Jenkins, Keokuk; Missouri Medical College, 1866.

Dr. George P. Hannwalt, Des Moines; Medical Department of Georgetown College, D.C., 1864.

Dr. James H. Boucher, Iowa City; Jefferson Medical College, 1856.

Dr. James G. House, Independence; Columbian Medical College, D.C., 1841.

Dr. Charles W. Davis, Indianola; Rush Medical College, 1853.

Dr. J. B. Buchtel, Des Moines; Cleveland Medical College, 1857.

Dr. E. J. McGorrisk, Des Moines; St. Louis University, 1864.

Dr. John D. McCleary, Indianola; Keokuk Medical College.

Dr. J. Grimes, Wapello; Keokuk Medical College, 1865.

Dr. Wm. H. Baxter, Wilton; Keokuk Medical College, 1865.

Dr. David Beach, Des Moines; Keokuk Medical College, 1861.

Dr. J. F. Wakefield, of Greenbush; Rush Medical College, 1868.

H. C. Fitzgerald, Van Metre, Keokuk Medical College, 1869.

Upon motion, the report was received, and each applicant duly elected a member of the Society.

Dr. Peck moved that when we adjourn, we adjourn to meet at 8 o'clock this evening. Carried.

Dr. Peck read a report of some especial cases of surgery, which was received and referred to the Committee on Publication.

The President stated that it was necessary to take some action in relation to the death of the late Dr. Whinnery, of Fort Madison.

On motion, Drs Carpenter, Thrall, and Peck were appointed to draft resolutions expressive of the sense of the Society on the death of the deceased.

The report of Standing Committees being in order, the Committee on Surgery read a report, which was received and referred to the Publishing Committee.

The Committee on Epidemics read a report, which was received and referred to the Publishing Committee.

The Committee on Puerperal Diseases offered a verbal report as a substitute for a written one, which the Chairman stated had been prepared and left at home.

On motion, the Committee were requested to forward the report to the Publishing Committee.

On motion of Dr. Peck, the subject of the use of carbolic acid was designated as a subject for discussion this evening.

On motion, the Society adjourned to meet at 8 o'clock P.M.

EVENING SESSION.

The Society met as per adjournment.

The President announced the subject for discussion, and remarks were made by Drs. Hazen, Carpenter, Rawson, Jenkins, Hawley, and others.

Dr. Carpenter, Chairman on Necrology, offered the following, which was received and unanimously adopted:—

WHEREAS, This Society has heard with deep sorrow of the death of Dr. Edward Whinnery, of Fort Madison, late Vice-President of this Society, and for many years one of the most zealous workers in the cause of science, and in the diffusion of moral influences among its members; therefore—

Resolved, That in his sudden calling off we recognize the omnipotence of the divine will of Him who giveth and taketh away; and may we emulate the example of our late worthy Vice-President.

Resolved, That in the death of Dr. Whinnery this Society deeply feels the loss of one whose pleasure it was to labor for its growth and usefulness.

Resolved, That as a tribute of respect to his memory, these resolutions shall be spread upon the records of the Society, and a copy of the same be transmitted to the family of the deceased, and that they be published in the *Iowa Medical Journal.*

On motion, a committee was appointed to report upon the value of an honorary degree as a claim to membership—Drs. Floyd, Peck, and Whitman, Committee.

The Committee on Drafts for Bills and Order of Business, appointed at the last annual meeting, of which Dr. W. F. Peck is Chairman, was, upon motion, continued.

Adjourned to meet at 8 o'clock to-morrow morning.

MORNING SESSION.

The Society met as per adjournment. The President in the Chair. The minutes of the proceedings of yesterday were read and approved.

On motion, Dr. Kennedy was requested to read reports of two cases of gun-shot wounds, which were received and referred to the Committee on Publication.

The Committee on the Uses and Abuses of Mercury offered a report which was received and referred to the Committee on Publication.

The Committee on Special Surgery read a report, which was received and referred to the Committee on Publication.

The Committee on Medical Topography and Meteorology made partial report, and the Committee was continued.

It was announced that Adjutant-General Baker had invited the Society to visit the Arsenal at 10 o'clock to-day; whereupon the following resolution was adopted unanimously:—

Resolved, That the thanks of this Society are hereby tendered to Gen. N. B. Baker for his kind invitation, but that acceptance thereof is incompatible, at this hour, with the business of the Society.

The Committee on Nominations for officers for the ensuing year offered the following report:

President—Dr. S. B. Thrall, of Ottumwa; *Vice-President*—Dr. N. Steele, of Fairfield; *Secretary*—Dr. A. G. Field, of Des Moines; *Treasurer*—H. L. Whitman, Des Moines; *Corresponding Secretary*—Dr. E. H. Hazen, of Davenport. *For Censors*—Drs. J. Williamson, of Ottumwa; M. A. Dashielle, of Hartford; Wm. Watson, Dubuque; James Gamble, Le Claire; George F. Jenkins, Sandusky; and David Beach, Des Moines. *For Trustees*—First District—Dr. A. M. Carpenter, Keokuk; Second District—Dr. W. F. Peck, of Davenport; Third District—Dr. J. C. Lay, of Dubuque; Fourth District—Dr. Wm. Voght, of Iowa City; Fifth District—Dr. C. H. Rawson, of Des Moines; Sixth District—Dr. N. S. Smith, of Belle Plaine.

Publishing Committee—Drs. H. L. Whitman, and A. G. Field, Des Moines; J. Williamson, Ottumwa; and A. M. Carpenter, Keokuk.

The report was received and unanimously adopted.

Adjourned to meet at 2 P.M.

AFTERNOON SESSION. 2 O'CLOCK P.M.

The Society convened as per adjournment.

Drs. Hughes and Caldwell were appointed to conduct the newly elected President to the Chair, who, on taking it, made a few remarks, thanking the Society for the honor conferred.

On motion, the Committee on Publication was given discretionary powers as to the discharge of its duties.

The report of the Publishing Committee was read and adopted.

The report of the Treasurer was received and adopted.

The financial report of the Secretary was received and adopted.

On motion, the Standing Committees are to consist of one each.

On motion, the Society adjourned to meet on the third Wednesday of February, 1870, in the City of Des Moines.

A. G. FIELD, *Secretary.*

Selections.

CONCERNING THE ACTION OF OPIUM UPON THE UTERUS, AND PARTICULARLY AS A PARTURIENT AGENT.

By P. C. BARKER, M.D., Morristown, N. J.

"Parturition consists in the expulsion of the fœtus and its appendages from the cavity of the uterus, and ends in the separation of the child and the mother" (Churchill). It is accomplished by means of non-striated contractile fibres, which are practically muscular, and constitute what is generally termed "the muscular coat of the uterus." These fibres are arranged in longitudinal, oblique, and (circular) transverse directions. The two first predominate in the body, and the latter in the cervix, and particularly in the "os uteri externum."

Before the expulsive contractions commence, which terminate the process, these circular fibres should relax, and the "os" become widely dilated; but irregular contractions of the different sets of fibres, or contractions of the circular alone (constituting false pains), or rigidity of the "os uteri," due to tonic contraction of its circular fibres, often prevent this physiological dilatation, and prove the source of great distress to the patient and annoyance to the obstetrician.

It was in cases of this character that I discovered in opium a valuable parturient agent. I will narrate a few cases which will illustrate how it became manifest to me:—

Case I. Mrs H., about 25, a strong and healthy woman, primipara, was taken in labor, 2 P.M., July 15th, 1862. Saw her soon after. Pains frequent, and of moderate severity; os dilated sufficiently to admit the point of the index-finger. Head

presenting in first position. Left her for half an hour, and upon returning found her condition unchanged. Visited her at intervals until late in the evening, when, no progress having been made, ordered antimon. et potass.-tart., gr. $\frac{1}{8}$, every half hour. Went home, leaving directions that I should be sent for if any change occurred. Messenger came to me about 2 A.M., 16th. No further dilatation. She complained very much of the severity of the pains. Tartar emetic, gr. $\frac{1}{4}$, every half hour. No improvement resulting, and nausea being constant, it was discontinued in the morning; and a stream of warm water was thrown upon the os, by means of a Davidson's syringe, for half an hour. This was repeated three times during the morning.

2 P.M. Still no dilatation. Patient a little feverish, and complaining of being very tired and sleepy. Ordered morph. sulph., $\frac{1}{4}$th, and left her to get a little sleep, while I went to attend to other engagements. Returning about an hour after, I found mother and child comfortably asleep side by side. About half an hour after taking the morphine she had a hard expulsive pain; and before any one could leave the house the child was born. The pains had not changed in character until just before the termination of the labor, nor had she been asleep.

Case II. Mrs. O., 35, multipara. Previous confinement easy. Taken in labor with her fourth child, November, 1863. Pains of same character as in Case I., for 16 hours producing little dilatation. At 1 A.M., gave morph. sulph., gr. $\frac{1}{3}$, hoping to quiet the pains. Left for home, a short distance away, and retired at once. Just as I was getting asleep, a messenger came for me in hot haste, stating that the child was born. Hastily dressing, I returned in time to remove the placenta. Less than three-fourths of an hour had elapsed since I quitted the house. She had but one pain, of different character from those which had tormented her so long unavailingly, previous to taking the morphine.

Case III. Mrs. W., about 24, primipara, sent for me early in the evening. Being absent from home, my former partner, Dr. F. D. Leute, of Cold Spring, N. Y., answered the summons. Upon my return I went to relieve the Doctor. There was no dilatation, although the pains had been recurring for some time. We gave her morph. sulph., gr. $\frac{1}{4}$, and went home, giving directions to send for me should any change occur.

On the following day, I learned that about half an hour after our departure she was seized with severe expulsive pains, which terminated the labor before a messenger could be dispatched after me.

It is obvious that morphine was given in these cases, as it is usually given by the profession, if at all, with the intention of obtaining a respite from the pains, in the hope that when they returned they would be more efficient. I was surprised in each case at the result; although in the first I attributed it to the repeated use of the warm douche, from its recognized power in certain cases of this character. In the succeeding cases I was obliged to look for a different explanation, and at length concluded that the morphine increased the expulsive power of the body of the uterus to a degree sufficient to overcome the circular fibres and connecting tissue of the "os uteri." Further light was thrown upon the subject by the following case:—

Case IV. Mrs. G., 28, multipara. In labor a number of hours. Os uteri remaining about half dilated, and rigid. Gave morph. sulph., gr. ¼. About half an hour after, while making an examination during a pain, my first and second fingers being applied to opposite sides of the os, in order that I might observe the effect of the pain upon its hitherto unyielding tissues, I was surprised to feel it easily dilating.*

In this case, I suspected that while opium stimulated the fibres of the body of the uterus (longitudinal and oblique), it also relaxed the circular fibres of the os. Further observation, in a large number of cases of varied character, has convinced me that opium, instead of having a general anodyne effect upon the uterus, possesses this special power as a parturient agent. I say general anodyne effect, for while it sometimes quites uterine contractions (witness its universal use for this purpose), yet it is in those cases in which the circular fibres are called into action alone, or where the longitudinal and oblique fibres contract irregularly—in short, in *false pains*. I am fully persuaded that *opium never did or can arrest a physiological* labor.

I have many times been called to cases in which the pains have returned regularly and with increasing intensity for a number of hours, without producing dilatation to any extent; and, after giving a full opiate, have had the satisfaction of finding a marked improvement, after sufficient time had elapsed

* I will add, for the benefit of those interested in the discussion which some time since appeared in the columns of one of our medical journals, concerning the propriety of making forcible attempts to dilate the os with the fingers, that I have for several years practised it, and think that I have shortened the first stage of labor many times thereby. In cases where the anterior lip has not been fully dilated after expulsive pains began, I have also shortened the second stage, by persistently pressing upon it until it receded beyond the presenting portion of the head, even after it had become œdematous. The *rationale* is quite simple: the tissues being subjected to increased pressure, relax sooner than they otherwise would.

for its absorption, the patient having even harder contractions, with less distress than before, and the os uteri being speedily dilated.

During the first stage of a physiological labor, I believe that the circular fibres of the os are passively relaxed, and that the active, usually gentle, contraction of the fibres of the body of the uterus serves to overcome the resistance which the tissues of the cervix and os present to dilatation.

Now, if the circular fibres of the os retain their tonicity, or if they contract with those of the body during a pain (and I have felt them contracting in a number of cases), no dilatation can be effected; or, at any rate, it will be with great difficulty, and the resulting distress will be greater than when they offer only the minimum amount of resistance.

The cases above narrated and referred to have taught me that opium possesses the power of relaxing the circular fibres, at least of the os, and of stimulating the longitudinal and oblique fibres into active contraction. It is upon these principles that opium is exhibited in dysmenorrhœa, when it is dependent upon spasmodic contractions of the circular fibres; or where it is owing to the presence of "menstrual decidua," clots, etc.

In abortions it is an invaluable remedy, facilitating dilatation, diminishing hemorrhage, promoting the expulsion of the placenta, and lessening suffering.

Ergot, on the other hand, by causing contraction of the circular fibres, retains the placenta, and, therefore, should rarely be given (in abortion) until after the fœtus and secundines have been expelled.

Placenta Prævia.—I have used opium in three cases of placenta prævia, one at the sixth month, and two at term, saving the mother in each instance. In another case, I attempted to turn, but, having made an erroneous diagnosis as to position, the placenta being planted directly over the os uteri, I introduced the wrong hand, and, failing to get hold of the feet properly, so as to bring them down, I detached the (entire) placenta, rather than lose time by changing hands. I mistook a R. Occip. Post. for a L. O. Anter. position. The hæmorrhage ceased at once, and the mother subsequently did well.

I think that opium meets two important indications in *placenta prævia:* 1. It facilitates dilatation, thus shortening the period of greatest danger. 2. It promotes the expulsive power of the uterus. It also serves to lessen hemorrhage by a special hæmostatic action.

It is an interesting fact, that in one of these cases, when the

respiration was reduced to four in the minute by cumulative action of the opium, which had been too frequently repeated by mistake, the uterus expelled the child with one pain, thus illustrating my statement that opium does not possess the power of arresting normal uterine contractions.

Hour-Glass, Contractions, etc.—While hour-glass, cylindrical, or other irregular tonic contractions of the uterus (particularly those which occur after the expulsion of the fœtus) may be (and doubtless are sometimes) spontaneous; still, in my experience, they have always seemed to be due to ergot. Since I have learned the special power of opium, as set forth in this paper, I have used it in these cases with invariable success, although some of the most approved obstetric authorities say such use "is objectionable."

I will give the following cases in point:—

Case V. *December, 1864.* Mrs. McD., aged about 38. Primipara. Labor progressed steadily until the head had fully distended the perinæum. Retrocession followed every pain; and, as they were neither strong nor long no progress was made. The vulva, too, was well dilated, and I gave f ℥jss. Squibb's fl. ext. ergot to complete the delivery. Fifteen minutes afterward the peculiar contractions produced by ergot commenced, and the child was soon born. Placing my hand upon the fundus of the uterus (it having been pressed upon by the hand of an assistant while the child was being delivered, and the funis tied and severed), I discovered it to be much elongated, reaching above the umbilicus; and, making a vaginal examination, found the placenta to be beyond the reach of my fingers, and, introducing the hand, discovered it so tightly grasped by an hour-glass contraction that I could not remove it. Gave morph. sulph. gr. ½, noting the time. A little less than half an hour afterward, I was awakened (having fallen asleep from great fatigue) by a contraction of the uterus under my hand. The placenta was expelled with considerable impulse, and the uterus contracted down almost entirely below the os pubis (which, by the way, judging by my experience, it seldom does, teachers and text-books to the contrary notwithstanding).

Case VI. Mrs. S., multipara. A delayed labor dependent upon inefficient pains. Gave f. ℥jss. ergot. The child being born, I delivered the placenta at once (as I now invariably do after giving ergot). A cylindrical contraction immediately followed, the fundus rising considerably above the umbilicus, in fact almost as high as the ensiform cartilage. The cylinder was about three inches in diameter, firmly and uniformly con-

tracted. An opiate was given, and in due time a permanent, globular contraction followed.

Dr. J. D. Trask, in his essay upon "Rupture of the Uterus," published in the *American Journal of Medical Sciences*, January and April, 1848, gives four cases of rupture of the uterus due to ergot. Malgaigne and others have reported similar cases. The following case is given to show how this accident *might* be produced in a diseased or even very powerful uterus, as well as to illustrate the apparently antagonistic effects of ergot and opium upon the gravid uterus.

Case VII. Mrs. M., multipara, about 35. Previous confinements easy. Present labor not worthy of note until the os was nearly obliterated, a ring only being left, when dilatation was for some unknown reason arrested, and no progress made for an hour. The uterine contractions then becoming inefficient, gave ʒjss. ergot. As soon as the pains peculiar to ergot began, I made an examination, and found the os less dilated than before, and its fibres contracting with those of the body. Gave gr. ⅓, morph. sulph. Within half an hour the pains had become more like those of a "physiological labor," the os uteri relaxed and became dilated, and the expulsion of the child speedily followed.

I gave opium in this case, with the expectation that it would produce a relaxation of the circular fibres of the os. It seems to have exerted this power in opposition to ergot as effectually as in the "hour-glass" and other irregular contractions above mentioned.

It may readily be seen that the simultaneous action of the ergot upon the os and body *might* have caused a rupture of the uterus. The contractions produced by ergot are continuous. I have often observed, however, that they have not been general, but have occurred in different sets of fibres successively. Herein lies one great danger of its use. In these, as well as all other irregular contractions of the uterus, I find opium a *prompt and reliable remedy*. In fact, I now use it in those cases of delayed labor dependent on inefficient uterine contractions, instead of ergot.

This property being established, the administration of opium admits of wide application in uterine therapeutics. In dysmenorrhœa, abortion, irregular contractions of the uterus of all kinds, previous, during, and subsequent to labor, and in placenta prævia as an adjuvant to Barnes' dilator, it will be found to be a valuable remedy; more certain in desired action (when given under proper indications) than any other remedy in our profes-

sion. Such at least it has been in my hands in quite an extensive obstetric experience.

In dysmenorrhœa, opium is given to quiet the contractions of the circular fibres (when this variety is present). In abortion, it is administered in the hope that the pains are caused by irregular contractions; and, if there is no dilatation (producing a partial separation of the membranes), it will often prove successful. If, on the contrary, the process has progressed so far as to render abortion inevitable, opium promotes it by relaxing the circular fibres of the os. It may appear at first strange to hear such apparently opposite properties ascribed to a remedy; but there is no inconsistency in the statement. The irregular (colicky) contractions do *not* constitute abortion, but they may produce it; and there is much less risk in a temporarily relaxed os uteri without pain, than in a normal condition of the os, with contractions of any kind in the body. In the "irregular contractions" at term (as in Cases V., VI., and VII.), it acts promptly,

I will state that cases might have been multiplied to a large number illustrating this subject; but the practical value of my paper would not have been enhanced at all, as the cases selected are as well or better-marked instances, each of its kind, than any others recorded by me since I commenced my observations seven years ago. (I had previously observed its powerlessness in quieting physiological uterine contractions, in the lying-in wards of Bellevue Hospital, while an interne.)

With respect to the mode of administration, I am not aware that it makes any difference what preparation of opium is used. I have generally employed solid opium pills, grs. 1 to 3, or morph. sulph., gr. $\frac{1}{6}$ to $\frac{1}{2}$ (the latter given dry on the tongue if nausea is present) at term. In abortion, if seen early, I give enemas of corresponding strength, usually employing from ʒss. to ʒj. doses of opii. tinct., in a tablespoonful of warm water, to be repeated after three hours if the pains continue, or later, if they return after being quieted. If abortion can not be prevented, the hypodermic syringe and Barnes' dilator of tampon are preferable. I have not used the hypodermic method at term, having been satisfied with the more gradual effects of administration by mouth; and, besides, I have thought that perhaps its rapid absorption into the maternal circulation *might* be injurious to the child. I have never observed any such effects following the administration by mouth. And, what is very singular, it seldom induces somnolency in the mother.

There are cases in which the os uteri (from previous inflam-

mation) is almost, and sometimes entirely, undilatable, over which opium (in common with all other known therapeutic agents) exercises no control, and for which the knife is the remedy.

In conclusion, it will be seen that the theory set forth in this paper explains phenomena in the action of opium upon the gravid uterus, which have hitherto, from the time of Denman to the present, been regarded as exceptional, and that it establishes the value of this remedy as a parturient agent.

My object in calling the attention of the profession to these peculiar and very useful properties of opium has been the promotion of a wider knowledge, and a more general application of them in practice; and I feel assured, that if opium is administered in the conditions and doses above indicated, it would not disappoint the obstetric practitioner.—*New York Med. Journal.*

ON GELSEMINIA.

By C. L. EBERLE.

Query 11th.—Is the so-called "gelseminia" a neutral or alkaloid principle? Does it exist in the leaves and in the wood of the root, or only in the bark? And does it represent the activity of the plant?

The root of gelsemium sempervirens has for a considerable time been employed in the medical practice of portions of our country as a nervous and arterial sedative—in large doses occasioning dizziness, dimness of vision, dilated pupil, and universal prostration, reducing the force and frequency of the pulse and the frequency of respiration, and producing insensibility to pain, but without stupor or delirium.

It is, therefore, exceedingly potent, and I am cognizant of at least two cases of poisoning by its unintentional use—one resulting in the death of the individual, the other recovering only upon the prompt administration of an antidote.

During the past 20 years, various writers have commented upon its uses and effects in the different medical journals of the day.

So far as I can learn, no published account of the existence of an alkaloid, covering the active principle of gelsemium sempervirens exists, if I may except a reference to its appearance by Mr. Henry Kollock, *Amer. Journ. Pharm.*, xxvi, 203, which was not elaborated. Yet I have received *private* statements of its presence and production, and have been privileged to ex-

amine an impure sample of the so-called "gelseminia," prepared by Prof. Maisch, which gave decided alkaline reaction with appropriate tests.

This gelseminia was produced by the following process:—

An alcoholic tincture was evaporated to small bulk, diluted with water to precipitate resin, filtered, precipitated with tannic acid, treated with hydrated oxide of lead, exhausted by alcohol, and evaporated; before dryness, ether was added, and upon spontaneous evaporation greenish-red crystals, mixed with resinous matter, resulted.

With a view to properly determine this query, early arrangements were made to procure from Albany, State of Georgia, through Messrs. Welsh, a supply of gelsemium sempervirens, which, being collected at the proper period, arrived during the spring of the present year. Upon examination, the sack forwarded contained portions of the entire plant, the gross weight of which was 6 avoirdupois pounds, 13 ozs. being roots, 13½ ozs. leaves, the remainder vines; and were shipped in this form in consequence of a misunderstanding, my purpose requiring but the roots and leaves.

The roots being prepared for percolation, were exhausted with strong alcohol, the tincture evaporated to the measure of a few fluid ounces (℥), water added carefully to precipitate a portion of the resin. A green fixed oil removed from the surface of the liquid with bibulous paper, by absorption, filtered, a solution of tannic acid added, until a precipitate was no longer produced; the mixture allowed to settle, poured from the precipitate, filtered; the filters preserved and dried, cut into small pieces, and, with the precipitate aforementioned, dried; powdered and digested with hydrated sesquioxide of iron. This was dried, exhausted by ether, and the etherial solution evaporated spontaneously.

The result to the naked eye exhibited an amorphous mass, but with a glass of ordinary power revealed groupings of acicular crystals, insoluble in water, and whose solution in acid by the aid of heat was not affected by either iodohydrargyrate of potassium or phosphomolybdic acid.

On the platinum foil, heated to redness, no trace of a stain was shown.

Placed upon the tongue in minute quantity, a slight bitterness was manifested, and, after an interval, followed by a decided acrimony, extending to the throat, remaining for several hours; this acrimony, however, is probably due to the presence of a slight quantity of a principle resulting from the next ex-

periment. The solution in ether having failed to develope an alkaline principle, strong alcohol was poured through the mass just treated with ether, the same being freed from its traces.

Upon evaporation, groups of crystals formed, a portion of which I here exhibit. There is a slight resinous impurity also present, but not sufficient in amount to embarass the complete exhibition of the crystalline structure. The solution is simply opalescent by reflected light.

This result gives the characteristic reaction with Mayer's test, as well as phosphomolybdic acid, and restores the blue color of litmus paper, which has been slightly reddened by fumes of hydrochloric acid.

Heated on platinum foil to redness, it inflames and is dissipated, with scarcely a trace of stain.

One-eighth of a grain troy administered to a young cat produced the symptomatic effects ascribed to an over dose of the drug, accompanied by much frothing at the mouth, and resulting in its death. An equal amount of the neutral product similarly administered to a kitten caused no manifest inconvenience. It is therefore to be presumed the principle soluble in alcohol, and which is also dissolved by diluted alcohol and hot water, is the representative principle of the drug, and which, if isolated in quantity, would prove to be its equal in therapeutic power.

I am pleased to be able to state that arrangements are being made to experiment with a large quantity of the bark of the root by one of our most competent associates; and the Association may hope to have a full account of the therapeutic action of this alkaloid at a future meeting—probably the next.

The wood of the root can be safely asserted, from careful experiment, to contain none of the alkaloid.

The full amount of leaves in my possession (13½ ozs.) were powdered and percolated by strong alcohol to exhaustion, concentrated, strongly acidulated by acetic acid, allowed to rest for a day, filtered and evaporated to a syrupy consistence by gentle heat. To this, alcohol containing one-tenth part of sulphuric acid was added, and digested.

This was neutralized by lime in slight excess, concentrated and allowed to rest, diluted with water and filtered; the precipitate was washed with diluted alcohol, and the liquid decolorized with animal charcoal, filtered, and evaporated by water bath to dryness. The residue powdered, exhausted by alcohol, with animal charcoal, filtered and evaporated spontaneously. This manipulation should exhibit the presence of the alkaloid in the leaf, should any exist. I have not entirely finished my

examination of it, but will communicate to Prof. Maisch the result of the investigation.—*Proceedings of American Pharmaceutical Association, at 16th Annual Meeting, held Sept., 1868.*

ON THE PREPARATION OF PYROPHOSPHATE OF IRON.

By SAMUEL P. DUFFIELD, PH. D.

Query No. 26. It is found that the process of the Pharmacopœia for pyrophosphate of iron yields a preparation which it is sometimes impossible to scale. Can a better process be devised?

Pyrophosphate of iron rendered soluble by means of citrate of ammonia was first proposed by M. E. Robiquet, to the Academy of Medicine at Paris. As prepared by him, the gelatinous precipitate was dissolved in citrate of ammonia solution, and a syrup was made from this solution. This process was improved by Prof. Proctor; the result was also a syrup. The formula, as it occurs at present in the United States Pharmacopœia, is that of Dr. E. R. Squibb, and exhibits the finished product in scales.

The pharmacopœia process is to ignite the $2NaO, HO, PO_5 + 24HO$, thereby converting it into the $2NaO, PO_5$. This is dissolved in water and mixed with solution of tersulphate of iron, at a temperature not exceeding 50° Fahr.; the resulting pulpy precipitate washed thoroughly and dissolved in solution of citrate of ammonia.

This process I have been disappointed in; it scales but imperfectly, and sometimes not at all.

I am not alone in my complaint; several have tried the same process and failed to get satisfactory results. After having tried faithfully for four times this process, I devised a slight modification, which gave me the most satisfactory results, never failing once to scale handsomely.

The process:—Take of the magma obtained from $8\frac{1}{2}$ oz. of pyrophosphate of soda (which is about $6\frac{1}{2}$ times as much by weight)—

Aqua ammoniæ. - - - - -	1 pint.
Citric acid, - - - - - -	6 oz.

Mix the pyrophosphate of iron (the magma) with the ammonia, and digest at a gentle water-bath heat, for 6 to 8 hours; then *gradually* add, constantly stirring, the 6 oz. of citric acid, dissolved in two pints of distilled water, *until* the ammonia is

neutralized, and the precipitate dissolved. Filter or decant, if necessary; evaporate to the consistency of a thick syrup; paint on glasses and scale as usual. The change which takes place on the addition of the ammonia is different from the appearance produced by the addition of citrate of ammonia solution.

In the case of the addition of aqua ammoniæ, the magma turns, in a few hours, of brick-red color; and in the case of the addition of citrate of ammonia solution, it dissolves to a gum color, similar to the iodide of iron liquor, before adding the syrup.

If, now, you add the citric acid to the brick-red colored magma, it gradually dissolves and becomes a greenish color by transmitted light, and dark-brown, almost black, when concentrated by reflected light.

That there is a different apportioning of elements produced by the modification, no one can deny. In the first you have pyrophosphate of iron in solution, by means of citrate of ammonia, a mixture of neutral salts. In the second you have, on the addition of ammonia, pyrophosphate of ammonia and sesquioxide of iron, which latter exists in a free state. On the addition of the citric acid it unites with the sesquioxide of iron, forming the citrate of the sesquioxide, mixed with the phosphate of ammonia. I think from this it will be seen that the composition is changed, the iron in the pharmacopœia formula (Squibb's) existing as a pyrophosphate; the iron in my modification existing as a citrate of the sesquioxide.

As the Pharmacopœia Committee consider their preparation an intimate admixtrue of ferruginous and ammoniacal salts, I do not consider I have *violated* the U. S. P.

Detroit, *Aug. 5, 1868.—Proceedings of American Pharmaceutical Association, at 16th Annual Meeting, held Sept., 1868.*

Book Notices.

A Practical Manual on the Treatment of Club-Foot. By Lewis A. Sayre, M.D., Professor of Orthopœdic Surgery in Bellevue Hospital, Medical College, etc., etc. New York: D. Appleton & Co. 1869.

This is a neatly published duodecimo volume of ninety-one pages, judiciously illustrated with cuts. The Author has had

an extensive practical experience in the treatment of the class of deformities about which he writes, and has given the profession in this little volume a very concise practical treatise, such as every intelligent practitioner can understand and apply.

For sale by S. C. Griggs & Co., Chicago.

A Treatise on the Function of Digestion; its Disorders, and their Treatment. By F. W. Pavy, M.D., F.R.S., Fellow of the Royal College of Physicians, etc., etc. From the Second London Edition. Philadelphia: Henry C. Lea. 1869; pp. 246. Price $2.

This is a neatly published reprint of the Second Edition of Dr. Pavy's work on Digestion and its Derangements. It presents the reader with a good summary of what is at present known concerning the physiological processes concerned in digestion; the pathological changes these processes are capable of undergoing, and the treatment they require. It is a convenient and practical work for the library of the practitioner. We have not had time to read the work in detail, and consequently cannot criticise any of its details.

The Structural Lesions of the Skin: Their Pathology and Treatment. Illustrated. By Howard F. Damon, A.M., M.D., Fellow of the Massachusetts Medical Society; Member of American Medical Association, etc., etc., etc. Pp. 255. Price $3.00. Philadelphia: J. B. Lippincott & Co. 1869.

This is a new work, published in beautiful style, and embraces subjects of practical interest to the profession. The author divides the diseases of which he treats into three classes, namely: Hypertrophies; Atrophies; and Pathological New Formations. We think it will be found a very interesting and profitable work, both for the student and the practitioner.

For sale by S. C. Griggs & Co.

Descriptive Catalogue of the Pathological Museum of the Pennsylvania Hospital. By Wm. Pepper, M.D., Physician to the Philadelphia Hospital; Curator and Pathologist to the Penn-

sylvania Hospital; Lecturer on Morbid Anatomy in the University of Pennsylvania, etc., etc. Philadelphia: Collins, Printer, 1869. Published by the Board of Managers.

This is a well-bound octavo volume, of 138 pages, consisting of a catalogue of the pathological specimens in the Museum of the Hospital, to which is added nineteen pages of description by the author. It is a volume of interest to all students of pathology, and especially to such as expect to visit the Museum.

For sale by W. B. Keen & Cooke, Chicago.

Proceedings of the American Pharmaceutical Association at the Sixteenth Annual Meeting, held in Philadelphia, Pa., September, 1868. Also the Constitution and Roll of Members. Philadelphia: Merriher & Sons, Printers, 1869.

This is an octavo volume, of over 500 pages, in paper cover. In addition to the record of proceedings of the Society, it contains a large number of reports and papers on all topics connected with the progress of pharmacy, the purity of drugs, the tariff, and other drug laws, etc., etc. We wish its contents could be read by every Member of Congress as well as by the larger part of the medical profession.

The volume is for sale in this city by E. H. Sargent, druggist. Price $2.50.

Editorial.

Chicago Medical Society.—The regular meetings of this Society are now being held once in two weeks. The Secretary, Dr. H. Wanzer, has kindly furnished us with notes of the proceedings of the meetings during the past month, but so much of our space has been occupied with the proceedings of the Illinois State Medical Society and the Iowa State Society, that we must omit their insertion, at least, for the present.

Summer Medical Institute.—The Spring and Summer courses of instruction in both the Chicago Medical College and

the Rush Medical College, closed with the 1st of July. Excellent classes of young men have been in attendance on the courses in both schools, and their opportunities for improvement have been as good, especially in the Clinical Department, as could be obtained in any city in the Union. The Announcements for the coming year, and an account of the new Mercy Hospital building will be given in our next issue.

VAGINISMUS.—Sometime last year, we published a case of this affection, in which the parties had been married three years without accomplishing sexual intercourse. We operated on the case as recommended by J. MARION SIMS. The result was entirely satisfactory; and a day or two since the wife became the mother of a full-sized, healthy boy, much to the joy of both parents.

KENTUCKY SCHOOL OF MEDICINE.

LOUISVILLE, KY., *May 20th, 1869.*

At a meeting of the Faculty of this School, May 13th, the following preamble and resolution were unanimously adopted:

WHEREAS, The medical colleges of the United States have, hitherto, in vain sought for an expression of the wish of the American Medical Profession in regard to the amount of fees proper for a single official course of collegiate lectures; and

WHEREAS, The American Medical Association did, by a vote conspicuously unanimous, decide on the 6th of May, 1869, that $120 should be accepted as the MINIMUM amount to be charged for such a course of lectures; and

WHEREAS, This vote is morally and honorably binding upon all who personally or by delegated authorlty entered into it; and

WHEREAS, The Faculty of the Kentucky School of Medicine, in common with all reputable members of the Medical Profession, accepts the decisions of the American Medical Association, as representing, through its delegated organizations, the sentiment and desire of the great body of American physicians;

Be it hereby Resolved, That the Feculty of the Kentucky School of Medicine acknowledges this officially expressed wish of the Association as its guide in this relation, and that it will

hereafter charge $120 for each official course of its collegiate lectures. L. J. FRAZEE, M.D., *Dean.*

The above circular from the Kentucky School of Medicine is excellent as far as it goes. We wish every Medical College in the country would thus officially recognize the authority of the American Medical Association. It would afford a good prospect for a speedy improvement in the whole system of medical education. That Association, at its first meeting, more than twenty years since, voted with "conspicuous unanimity" that the length of the official College Lecture Terms should be *six months;* that a *standard of preliminary education* should be required; and it has repeated these votes scarcely less than a dozen of times since. Again, at a full meeting in 1866, the same Association voted with entire unanimity, not only, in favor of a Lecture Term of *six months*, and a standard of *preliminary education*, but also in favor of *three courses of Lectures*, and a consecutive order by dividing the branches of study and the students into *three classes, etc.* Will the Kentucky School of Medicine, and all other schools, as promptly acknowledge and adopt all these important recommendations of the Association as they have the one concerning *fees?* Most certainly, if the National organization is competent to decide what should be the *minimum fee* for an official Lecture Term, it must be equally competent to decide what should be the *minimum length* of such Lecture Term, and *how many* such should be attended to render the student elligible to graduation. As has been well said by the Editor of the Leavenworth *Medical Herald*, there are other methods of underbidding for students more injurious to the profession than simply lowering the nominal lecture fees. The giving of credit for lecture fees; the adoption of short terms; few examinations; no positive requisition for clinical attendance or practical dissections, are all means for attracting students and cheapening the Diploma, far more injurious in their practical results than an openly adopted low rate of fees. Indeed, there can be no uniform standard or rate of Lecture fees in our Medical Colleges, until we have secured first uniformity in the plan of their organization, their curriculem of

studies, the length of their Lecture terms, and the number of such terms to be attended before graduation. The only true test of the "*cheapness*" of a Medical School, is the aggregate expense the student is required to incur before obtaining his Diploma. For instance, if the Kentucky School of Medicine should charge a Lecture fee of $120 00, and require the student to attend two courses of four months each before graduation, the student's aggragate expenses would stand thus:

Lecture fees, two courses, $120 00 each,	$240 00
Two courses of four months each, 35 weeks, board $5 00 per week,	175 00
Total,	$415 00

If the Chicago Medical College should charge a Lecture fee of only $50 00, and require attendance on *three* courses of Lectures of six months each before graduating, the student would foot up his aggregate expenses thus:

Lecture fees, three courses, $50 00 each,	$150 00
Three courses of six months each, 78 weeks board at $5 00 per week,	390 00
Total,	$540 00

Would the student have any difficulty in determining which was the *cheap* school? We are in favor of a fair and reasonable rate of Lecture fees in all Medical Colleges. We are also in favor of making them as nearly uniform as practicable. And the foregoing remarks and illustrations have been made for the sole purpose of showing that to attain these ends requires a consideration and adjustment of the whole system of Medical College organizations throughout the country.

Dr. Alden March.—Another of the noble and generous spirits in our profession has taken its departure. Dr. Alden March, of Albany, New York, died June 17th, 1869, at the age of 74 years. He had practiced medicine in Albany 49 years; was the founder of the Albany Medical College, and the City Hospital, and one of the most eminent practitioners and teachers of Surgery in our country. He was known, respected, and honored by the profession on both sides of the Atlantic. Only a short time since he had donated his valuable pathological collection to the Museum of the College, with a legacy of $1,000, the interest on which was to keep the Mu-

seum in order, and a like sum to the City Hospital, to keep the same supplied with instruments. He was a man of great energy and perseverance, of high social qualities, and a devoted Christian. Although at the ripe age of 74 years, he died in the midst of his professional activity and usefulness. Only little more than six weeks previous to his death he was in attendance on the Annual Meeting of the American Medical Association, in New Orleans, one of its most honored ex-presidents; and was congratulated by his friends on account of his apparent health and vigor. But so it is; in the midst of life the *grim messenger* is often at the door.

LIBRARY MEDICAL DEPARTMENT UNIVERSITY OF LOUISVILLE,
May 27th, 1869.

At a meeting of Delegates from Medical Colleges for the purpose of considering the question of fees, which was held this day, the following Colleges were represented by Delegate or letter, *viz:*

University of Nashville; Shelby Medical College, Nashville; Memphis Medical College; St. Louis Medical College; Humbolt Medical College, of St. Louis; Rush Medical College, of Chicago; Chicago Medical College; Indiana Medical College, of Indianapolis; Miami Medical College of Cincinnati; University of Louisville.

On motion, Dr. Bowling was elected Chairman, and Dr. Bayless, Secretary of the meeting. After a prolonged conference, the following preamble and resolutions were adopted:

WHEREAS, The call for a Convention of Delegates from the Medical Colleges of the West, for the purpose of arranging a uniform scale of fees, sent by the Faculty of the Medical Department of the University of Louisville to the Colleges of Nashville, Memphis, Cincinnati, Columbus, Cleveland, Detroit, Chicago, St. Louis, Indianapolis, and Louisville, has met with a cordial response in person or by letter from a majority of said Colleges; and

WHEREAS, The fact that several of said Colleges have issued their Announcements for the ensuing sessions, makes definite action at present impossible; and

WHEREAS, The views and opinions of the various schools as given by delegates and letters differ greatly; therefore be it

Resolved, That it is the hope of this Convention that a uniform scale of charges shall be adopted by all the Medical Col-

leges of our country, and we do most earnestly advise such a scale as shall be agreed upon; and it is our belief that the glory and usefulness of our profession would be enhanced by the adoption of the highest rate advised by the American Medical Association.

Resolved, It is not less to be hoped that all the Medical Colleges of our country would fix a higher standard of preliminary and medical education as a pre-requisite for graduation.

Resolved, That the Convention request all the Medical Colleges in the United States to send each one Delegate to a meeting to be held in Washington, on Monday, May 2d, 1870, to take efficient steps toward carrying out in good faith the recommendations of the American Medical Association in reference to medical education, and also to form a permanent association of American medical teachers.

Resolved, That a copy of these proceedings be sent to all the medical journals in the country.

WM. K. BOWLING, *President.*

GEO. W. BAYLESS, *Secretary.*

TREATMENT OF LEAD POISONING.—Dr. Wm. Frank-Smith states (*Lancet*) that in lead-poisoning the treatment by iodide of potassium has been less efficacious in his practice than by sulphuric acid and the sulphates. The formula used by him, which acts, he says, "with remarkable celerity and certainty," is as follows:—Sulphate of quinine, sulphate of iron, of each, one grain; strychnia, $\frac{1}{16}$ of a grain; dilute sulphuric acid, five minims; sulphate of magnesia, one drachm; water, one ounce: three times a day.—*N. Y. Med. Gazette.*

PARALYSIS FOLLOWING THE USE OF CHLOROFORM.—At the session of the k. k. Gesellsch. d. Aerzte, Vienna, Feb. 19, there was reported a case in which the patient became completely aphonic and aphasic after awaking from the slight degree of narcosis required for the removal of a tooth. There was also at that time considerable spasm of the glottis, most marked during inspiration. The loss of voice and speech continued during five weeks; but for three weeks past, the patient has been able to speak in a low voice. The treatment up to the date of report was mainly by electricity; the constant stream is found most useful. Dr. Hofmokl, who reported the case, believes that the symptoms were due to cerebral apoplexy, caused by the chloroform narcosis. The patient was a perfectly healthy woman, a cook, aged 22, and never had hysteria.—

Wochenbl. d. k. k. Ges. d. A. in W., Mar. 3.—Boston Med. and Surg. Journal.

At the meeting of the Lyceum of Natural History, on Monday last, Professor Edwards brought forward a useful application of the spectroscope to the pharmaceutist's business. He had noticed that druggists had put chemicals which were affected by sunlight in blue bottles—the very worst color to use, as it permitted nearly all the chemical rays to pass through. At his suggestion, yellow bottles had been substituted by a member of his class; this color stopping all the chemical rays. The question was, to determine the exact tint of yellow to use. By means of the spectroscope, in a few seconds he had been able to pick out the best glass to make the bottles of, as the spectrum was more shortened by some than by others.—*N. Y. Med. Gazette.*

Cure of Cataract without Operation.—Dr. Travignor has communicated to the Paris Academy of Medicine a method by which cataract may be cured without an operation. It consists in applying to the diseased eye a phosphureted collyrium, which operates by gradually restoring the transparency of the crystalline lens, from the circumference to the centre, which is the last to yield. The formula is as follows:—Oil of sweet almonds, 30 grammes; phosphorus, 10 centigrammes; dissolve in a water bath at 80 deg. centigrade, in a close and full vessel. Three or four times a day, 4 grammes of this solution should be instilled between the eyelids of the diseased organ, continuing to do so for several months.—*The Med. Mirror and Med. Record.—N. Y. Med. Gazette.*

Mortality in the Hotel Dieu.—Vicq. d' Az yr and Lavoisier having been requested by the Academy of Sciences of Paris to compare with respect to the relative mortality the Hotel Dieu and La Charite, have signed a report in which the following passage occurs: "The Hotel Dieu, in fifty-two years, out of 1,008,741 patients has lost 244,720, a proportion of one in four and a-half. La Charite, which has only had a mortality of one in seven and a-half, has lost 168,700. From these statistics results the fearful consideration that the Hotel Dieu has in fifty-two years cost France 99,044 citizens, whose lives would have been preserved if the Hotel Dieu had enjoyed as favorable position as that of La Charite. The loss of life in

these fifty-two years represent 1906 deaths a-year, about the tenth part of the total and continuous mortality of Paris. The maintenance of this hospital, or rather of the situation which it occupies, produces therefore the same effect as would a plague which unceasingly desolated the capital.

Vaginitis.—Dr. Neftel, of New York, relates three cases of vaginitis occurring in women of high social position; in one of whom, on account of the aggravated form of the disease, sexual intercourse had become impossible, coincident with a saturnine intoxication, resulting from the prolonged use of a cosmetic containing lead. The intoxication manifested itself by paralysis and atrophy of the extensors, so that the patients were unable to extend their hands, fingers, or thumbs, while the supinator muscles, as well as the deltoid, biceps, and triceps, were in a normal state. The electro-muscular contractility and sensibility were very much diminished, if not entirely abolished. Two of the patients were cured by the internal use of the iodide of potassium and sulphur, and without having employed any local means for the vaginitis. It disappeared at the same time with the paralysis, so that the married woman who had hitherto been sterile, and had for that cause consulted Dr. Marion Sims, has since become a mother.—*L' Union Medicale and Am. Jour. of Obstetrics.—N. Y. Med. Gazette.*

On certain Physical and Physiological Properties of Muscles.—M. Chmoulevitch has just published, on the above question, an interesting paper, which may be summed up thus: —1. When heat acts upon a muscle at rest, it produces two effects—one purely physical the other physiological. The physical effect is observed only between 2 and 28 degrees centigrade. Between these limits, the muscle acts, under the influence of heat, in a manner opposed to all other known bodies: it shortens in becoming warm, and lengthens in cooling. 2. Beyond 28 degrees centigrade, the purely physical influence which has just been described is complicated by a novel action of a physiological nature. If the temperature of the muscle be raised in a regular manner up to 40 or 41 degrees, a shortening is produced, of which the rapidity increases between 35 and 41 degrees; the muscle is in a condition which has been termed *rigidity through heat.* 3. When it is required to produce this kind of rigidity in two muscles, one of which has been separated from the body two or three hours before the other, a higher

degree of temperature must be employed for the first muscle. 4. The size of the muscle diminishes during cadaveric rigidity. 5. The specific weight of the muscle increases under the same influence. 6. At the same time, the absolute weight of the muscle diminishes. 7. The size of the muscle diminishes in like manner during *rigidity through heat.* 8. The mechanical tension of the muscles also produces a diminution of their size. This result, according to the mechanical theory of heat, is in accordance with another fact, which is—9. That in muscles (and especially living muscles) a certain quantity of heat is set free under the influence of mechanical tension.—*Lancet.*—*N. Y. Med. Gazette.*

Saccharite of Iron as a Medicine.—Oxide of iron forms an important constituent of the blood; it gives the red color to blood, and assists in the building up of the corpuscles. Liebig is of the opinion that the oxide of iron plays a very important part in the oxidation of the food, and in keeping up the heat of the body. If from the blood, by rapid growth, or any cause, iron is removed, the normal influence of the blood on the nerves is changed, and all of the symptoms of chlorosis are manifest. According to the physiological researches of Mialhe, Bouchartd, and Quevenne, in Paris, iron in a soluble condition is much more readily assimilated than when it is in the insoluble modification; it is also much more easily digested when taken with food than upon an empty stomach; and as the total amount the blood is able to assimilate is very small, the object can only be reached by continuing the use of it for a considerable time.

It has been found that the hydrated sesqui oxide of iron is soluble in rock candy—from this solution ammonia will no longer precipitate the oxide. Advantage has been taken of this reaction in Germany, and sugar bon-bons are now prepared under the name of Dr. E. Fleischer's soluble iron saccharate. They are put up like sugar plums, and contain $\frac{1}{15}$ of a grain of metallic iron in each bon-bon. They are also flavored with some kind of *liqueur*, and would never be suspected to be medicine by any child. Beside the bon-bons, the solution is kept in bottles, in a form suitable for drinking with food. The pyrophosphate of iron is also prepared in a similar way, thus affording phosphorus and iron at the same time. This preparation of iron has not been introduced in the United States, and ought to be better known.—*Journal of Applied Chemistry.*—*N. Y. Med. Gazette.*

Mortality Report for Month of April, 1869:—

Accidents, falls,	6	Chicken-pox,	1	Kidneys, Bright's disease,	3
" drowned,	1	Croup, membranous,	1	" paralysis of,	1
" amputation for injuries,	1	Debility,	2	" tumor of,	1
" internal injuries,	1	" general,	1	Liver, cirrhosis of,	1
" injury to brain,	1	Diabetes,	1	Lungs, congestion of,	2
" run over by wagon,	1	Diarrhœa,	3	" paralysis of,	1
" circular saw	1	" chronic,	2	Measles,	1
" kick of horse	1	Diphtheria,	5	Meningitis,	6
" poisoning,	1	" and teething,	1	" and brain effusion,	1
" overdose wine colchicum,	1	Dropsy,	3	" cerebro-spinal,	3
" railroad,	2	Dysentry,	2	" tubercular,	1
" crushing of both legs,	1	Emphysema,	1	Metritis,	1
Abscess, hepatic,	1	Encephalitis,	4	" and gastritis,	1
Anus, imperforate,	1	" and meningitis,	1	Manslaughter,	1
Angina tonsillaris,	1	Endo-carditis,	1	Miscarriage,	1
Apoplexy,	5	Erysipelas,	2	Old age,	8
Ascitis,	1	Fever, congestive,	1	Œsophagitis, inflammation of,	1
Arachnitis,	1	" puerperal,	3	Œdema pulmonem,	2
Births, still,	35	" remittent,	1	Paralysis,	2
" premature,	19	" scarlet,	44	Peritonitis,	5
" tedious,	2	" malignant,	1	Phlebitis, uterine,	1
Brain, congestion of	5	" and meningitis,	1	Pneumonia,	28
" and lungs "	1	" typhoid,	6	" broncho,	3
disease "	1	" typhoid and bronchitis,	1	" typhoid,	1
" injury to,	1	Gangrene of leg,	1	" whooping-cough,	1
" inflammation of,	3	Glands, prostate, inflammation of,	1	Pyæmia,	1
Bronchitis,	3	" of neck "	1	Rheumatism and cardiac disease,	1
Cancer,	2	Gastritis,	4	Scrofula,	2
Cerebritis,	1	" acute,	1	Suicide,	5
" and softening of brain,	1	Hemorrhage, internal,	1	Small-pox,	2
Childbirth,	2	Heart, disease of,	4	Spine, disease of,	1
Chorea and convulsions	1	" and liver, "	1	Suffocation,	1
Convulsions,	30	" hypertrophy of,	2	Tabes mesentrica,	6
" puerperal,	1	" organic disease of,	2	Teething,	2
Colic,	1	" rheumatism of,	1	" and convulsions,	1
Consumption,	53	" valvular disease of,	1	Whooping-cough,	10
" and emphysema,	1	Hepatitis, acute,	1	Unknown,	1
Croup,	5	" chronic,	1		380
		Hernia,	1		
		Hydrothorax,	1		
		Hydrocephalus,	4		
		" acute,	2		
		Inanition,	8		
		Intemperance,	3		

COMPARISON.

Deaths in April, 1869, 380 | Deaths in April, 1868, 305 | Increase, 75
Deaths in March, 1869, 353 | Increase, 27

AGES.

Under 1	91	30 to 40	38	80 to 90	1
1 to 3	70	40 to 50	23	90 to 100	1
3 to 5	30	50 to 60	22	Unknown	2
5 to 10	19	60 to 70	11		
10 to 20	16	70 to 80	14	Total,	380
20 to 30	41				

Males, 199	Females, 181	Total, 380
Single, 271	Married 109	Total, 380
White, 374	Colored, 6	Total, 380

NATIVITY.

Atlantic Ocean,	2	Denmark,	1	Norway,	6
Belgium,	1	England,	5	New Brunswick,	1
Bohemia,	5	France,	2	Sweden,	7
Canada,	4	Germany,	55	Scotland,	9
Chicago, Native,	48	Holland,	3	Unknown,	3
Chicago, Foreign,	123	Ireland,	39		
U. S., other parts,	65	Isle of Man,	1	Total,	380

MORTALITY BY WARDS FOR THE MONTH.

Ward.	Mortality.	Pop. in 1868.	One death in	Ward.	Mortality.	Pop. in 1868.	One death in
1	6	9,094	1,515⅔	14	28	14,839	530
2	4	13,074	3,268½	15	26	21,078	810 2-5
3	15	15,076	1,005 1-15	16	24	15,465	644⅓
4	27	17,796	655 2-5	County hos.	9		
5	24	16,033	668	Accidents,	18		
6	15	13,083	872	Mercy Hosp.	3		
7	37	25,492	689	Suicides,	5		
8	21	15,813	753	St. Jo. Orph. Asylum	6		
9	24	19,297¼	804	Manslaughter	1		
10	13	12,925	994	Lake Hosp.	1		
11	18	14,340	796⅔	Home for the Friendless,	6	St. Luke's Orph. Asylum,	1
12	31	17,485	564				
13	17	11,164	656⅔				

Total, 380

Mortality for the Month of May, 1869:—

Accidents, brain, concussion of	1	Ascitis,	2	" general,	5
" drowned,	3	Births, premature,	39	Deficient development,	2
" burns,	1	" still,	10	Diarrhœa,	6
" by laudenum	1	Bowels, inflammation,	2	" chronic,	6
" overdose whiskey, child, by self	1	Brain, congestion of,	2	" convulsions	1
" lightening,	1	" inflammation of	1	Diphtheria,	2
" run over by engine,	2	Bronchitis,	3	" scarlet fever,	1
" railroad cars	1	" capillary,	1	Drowned,	2
" pistol shot,	1	Cancer encephaloid,	1	Dropsy and pneumonia	1
" by fall,	1	Cerebritis,	1	Dysentery,	3
" injury to spine,	1	Cerebritis and paralysis	1	Encephalitis,	1
" fracture of spine,	1	Chest, dropsy of,	1	Enteritis,	3
Abscess, hepatic,	1	Cholera infantum,	2	Fever, congestive,	1
Anasarca,	1	Convulsions,	34	" puerperal,	4
Angina,	2	" puerperal,	1	" scarlet,	26
Apoplexy,	4	Consumption,	44	" " and pneumonia,	1
" from intemperance,	1	" caries of pelvis bones,	1	" typhoid,	13
		Congestion, visceral,	1	Hemorrhage of liver,	1
		Croup,	4	Gangrene, from injuries,	1
		" membranous,	1	Heart, disease of,	5
		Cyanosis,	1	" rheumatism of,	1
		Cyanch maligna,	1	" valvular dis. of,	1
		Debility,	1		

Hernia, strangulated,	3	Lungs, paralysis of,	1	whipping,	1
Hydrothorax,	1	Leucothemia following childbirth,	1	Small-pox,	3
Hydrocephalus,	10	Lungs, hemorrhage of,	1	Shock from surgical operation,	1
" acute,	4	Mouth, canker-sore,	3	Stomach and liver, disease of,	1
Inanition,	8	Manslaughter,	1	" cancer of,	1
Intemperance and exposure,	2	Measles,	9	" organic disease	1
" and childbirth	1	Meningitis,	3	Suicide,	1
Intupusceptio,	1	" cerebro-spinal,	3	Tabes mesentrica,	12
Jaundice,	2	" tubercular,	1	Teething,	4
Kidneys, Bright's disease of,	5	Old age,	8	" convulsions,	3
Liver, cancer of,	2	Œdema pulmonum,	2	Tetanus,	2
" fatty degeneration of,	1	Paralysis,	2	Uterus, cancer of,	3
" organic disease,	1	Peritonitis,	3	" disease of,	1
" abscess of,	1	" puerperal,	2	Whooping-cough,	11
Lungs, congestion of,	5	Pleurisy,	1	" pneumonia,	2
" emphysema of,	1	Pneumonia,	14		
		" typhoid,	5	Total,	372
		Shock from excessive			

COMPARISON.

Deaths in May, 1869,—372 | Corresponding month, 1868,—321 | Increase,—51
Deaths in preceding month, 1869,—381 | Decrease, —— 9

AGES.

Under 1 year	95	30 to 40	28	80 to 90	1
1 to 3	69	40 to 50	34	90 to 100	3
3 to 5	26	50 to 60	17	Unknown	1
5 to 10	21	60 to 70	17		
10 to 20	17	70 to 80	8	Total,	372
20 to 30	35				
Males,	195	Females,	177	Total,	372
Married,	112	Single,	260	Total,	372
White,	365	Colored,	7	Total,	372

NATIVITIES.

Austria,	1	Denmark,	4	Poland,	1
Bohemia,	8	England,	10	Switzerland,	1
Bavaria,	1	France,	1	Sweden,	18
Canada,	6	Germany,	40	Unknown,	4
Native, Chicago,	67	Holland,	5		
Foreign "	88	Ireland,	41	Total,	372
U. S., other parts,	67	Norway,	9		

MORTALITY BY WARDS FOR THE MONTH.

Wards.	Mortality.	Pop. in 1868.	One death in
1	6	9,094	1,515⅔
2	12	13,074	1,089½
3	16	15,076	942¼
4	29	17,796	613⅜
5	19	16,033	843¾
6	15	13,083	872 1-5
7	33	25,492	772½
8	17	15,813	930⅙
9	19	19,297	1,150⅔
10	14	12,925	923 1-5
11	14	14,340	1,240 2-7
12	17	17,485	1,280⅔
13	17	11,164	656⅔
14	18	14,839	824 2-5
15	23	21,078	916 4-7
16	23	15,465	672⅓

Mortality.	
Accidents,	14
County Hospital,	14
Home for Friendless,	4
Hospital Alexian Brothers,	1
Hospital for Women and Children,	1
Immigrants,	25
Mercy Hospital,	6
Marine Hospital,	3
St. Joseph Orphan Asylum,	6
Manslaughter,	1
Lake Michigan,	1
River, Chicago,	2
Suicide,	1
Huron Street Police Station,	1
Total,	372

The increase of mortality is quite marked compared with the month of May, 1868; and is not to be wondered at, when the extremes of temperature and the great amount of rain that has fallen are borne in mind. More deaths resulted from accidental causes this year than last, whilst the mortality by brain diseases is less. The increase, however, by pulmonary and bowel affections is decided, being 38 more. Owing to the comparative immunity from contagious diseases, the climatic influences on life are still more marked, and will be better appreciated by the following comparative table:—

	1868.	*1869.*		
Highest temperature,	75°	81°	+	6°
Lowest "	43°	42°	=	1°
Range "	32°	39°	+	7°
Mean "	55°	54°	=	1°
Rain, - - -	3748 in.	5670	+	1922 in.

The number of still and premature births reported this month are about the same as last year, due allowance being made for the increase of population.

PRURITUS VULVÆ.—It is stated (*Gazette des Hopitaux*, Jan. 7th, 1869) that this annoying affection is often entirely cured and always diminished by a lotion consisting of five parts of corrosive sublimate dissolved in fifty parts of alcohol. A teaspoonful of this solution is to be diluted with a pint of tepid water, and applied as a wash to the parts several times in the day.—*Boston. Med. and Surg. Journal.*

THERE is a doctor for every 1000 inhabitants in Paris, and the apothecaries number 547. There are also 295 officers of health.—*Med. and Surg. Reporter.*

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Dissecting Ticket,	5.00
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The Summer Reading and Clinical Term commences on the first Monday in April, and continues until the first Monday in July; and is free to all matriculated Students of the College. Boarding, $3.50 to $4.50 per week. For further information, address

E. ANDREWS, M.D., *Sec'y of the Faculty.*

THE

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N. S. DAVIS, M.D., EDITOR.

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Original Contributions.

ARTICLE XXVIII.

VARICOCELE TREATED BY SOLUBLE ANTISEPTIC LIGATURES.

BY E. ANDREWS, M.D., Prof. of Principles and Practice of Surgery, Chicago Medical College.

Prof. Lister, of Glasgow, Scotland, gives an account in a late London *Lancet* of an experiment upon a calf, in which he tied the carotid artery in two places with animal ligatures, soaked in carbolic acid solution. One of the ligatures was a piece of fine catgut, and the other a string made by twisting up strips of calf's peritonæum. The ligatures were cut off close and left in the wound. The whole wound was then well washed with solution of carbolic acid, closed with sutures, and sealed up, air-tight, with a carbolic acid dressing, covered with tin foil, and healed by first intention. The Editor of the *Lancet*, in commenting on this experiment, makes the remarkable, but erroneous statement, that the dead animal ligatures employed acquired bloodvessels, etc., and actually became living organized tissues. This, however, is a laughable misconception. Professor Lister states simply this:—At the end of a month the calf was killed, and the parts carefully dissected. The incision had healed without suppuration, nor was there a particle of pus at the places of the ligatures. The artery was found perfectly closed,

though the proximal ligature was close to a large branch. At first glance, it *seemed* as though the ligatures had become organized, because their places were occupied by bands of living, fibrous tissue, running round the vessel, and giving it great strength and security, notwithstanding the proximity of the large arterial branch. Close examination, however, showed that the bands consisted of new tissue, simply occupying the places of the ligatures which had become gradually absorbed. On the posterior side of the artery, a small piece of each ligature remained, whose absorption had not yet been completed.

On reflection, it seemed to me that this principle should be available for the treatment of varicose veins. The operation upon such veins by ligature has been justly dreaded on account of the occasional deaths from the septic form of phlebitis, and consequent pyæmia. The ordinary ligature, extending from the vessel to the external air, makes a deep, narrow fistula, in which the pus decomposes and gives origin to the usual poison, which soon transmits the unhealthy septic influence to the veins and to the whole system, unless the patient is peculiarly plastic in his constitution. It occurred to me that if antiseptic ligatures could be put on, of a nature that admitted of their being ultimately absorbed, without suppuration, all danger of purulent infection would be avoided; for it is to be remarked that a simple plastic inflammation of the veins has no tendency to infect the system, and is not at all dangerous.

To test the question, I devised an operation where results seem to me to be eminently satisfactory. I took a case of varicocele, and proceeded as follows:—

I prepared a number of ligatures by stripping up a piece of fresh tendon from the foreleg of an ox. These I threaded into large surgical needles, and dropped them into a watery solution of carbolic acid, containing about 20 grains to the ounce. Separating the veins from the vas deferens in the usual way, I passed a needle and ligature from before backward, between the two, bringing the needle out behind the scrotum; then, pressing the veins inward, I reinserted the needle into the same hole, and carrying it this time on the outer side

of the veins, I brought it out of the original front opening, as in a well-known method of ligating the veins. I had thus an animal carbolized ligature surrounding the veins, with both ends returning from the same orifice. I now tied a knot, trying, as I drew it, to make it sink in through the opening. Here occurred a difficulty. Tendon is not as strong as silk, and hence the ligature has to be proportionably larger, from which cause the ties were so bulky that there was difficulty in causing them to retire into the opening made by the needle. I was obliged to enlarge the orifice with a bistoury, and then succeeded in making each tie sink through the opening, so that I got a square knot upon the vessels, and cut off the tendon close to them. I now found that I could make the knot disappear from sight entirely and close the skin over it. A second ligature was applied in the same way. I washed all the orifices with a 20-grain solution of carbolic acid, and sealed them up by applying collodion, in which was dissolved 10 per cent. of carbolic acid. The ordinary inflammation occurred, but of a plastic character, and without suppuration. After a week, the collodion gradually loosened its hold, and the orifices were found closed by first intention. The veins were evidently obliterated, but swollen and tender, as usual. The knots could be felt in the interior, surrounded by plastic lymph; but no abscesses occurred. The soreness subsided in about the usual time, and the ligatures remained without producing any trouble, and are doubtless now undergoing the process of absorption. It should be stated that the strength of the carbolized collodion irritated the skin at one point and raised a semi-suppurative blister; but the puncture was nevertheless found closed by first intention, and not suppurating at all. I deem this experiment upon the tying of veins to be of great importance; and if future trials shall yield similar results it will enable us to operate upon them with perfect impunity.

It is evident that the ordinary surgical needle does not cut an orifice wide enough for tendinous ligatures. I have ordered some made with blades three times the ordinary width. Doubtless, however, the same result could be obtained by making the

anterior orifice in the skin by a narrow scalpel, and then passing the ordinary needle through the wound. It is important to remove the hairs from the scrotum before commencing, otherwise they will be entangled in the knots. Finally, let it be borne in mind that pyæmia rarely comes on in surgical cases, unless the patient is predisposed to it by lying in close, insufficiently ventilated apartments. Surgical patients require for their safety a constant current of fresh air flowing over them; and the fear which we have in pulmonary cases of exposing them to a draft is out of place in surgery. The idea that wounds "catch cold" is a vulgar prejudice, which our late army experience has effectually exploded.

81 Monroe Street.

ARTICLE XXIX.

EXCISION OF SUPERIOR MAXILLA IN A CASE OF CHONDROMA.

By H. WARDNER, M.D., of Cairo, Illinois.

Nimrod Hughes, a private soldier of the Seventh Tennessee Cavalry, entered the U. S. General Hospital, at Mound City, Ill., in the fall of 1864, being sent to the rear from Nashville, on account of a tumor, or rather an enlargement, of the left side of the superior maxilla, which prevented him from taking food except in a fluid form. The tumor had been growing for about five years, but had not been of any great inconvenience until within the last year preceding the above date. It involved nearly all of the alveolar process of the affected side, but had not extended to the body of the bone, so as to cause any enlargement. The tumor protruded internally and externally, and somewhat posteriorly on the outer side. It filled about half the cavity of the mouth. The teeth were greatly distorted: one of the molars pointed horizontally across the mouth, and others turned outward against the cheek. The ex-

ploring needle was readily passed into it, and proved it to consist of thin laminæ of bone, with an outer substance of sarcomatious or cartilaginous character. His general health was good. His complexion ruddy and free from that peculiar cachectic appearance attending malignant disease. The diagnosis was, therefore, non-malignant chondroma; and the prognosis, under surgical treatment, was favorable. The patient was willing and anxious to have the diseased bone removed.

Accordingly, on the 20th of December, 1864, assisted by Surgeon Hoard, U. S. N., and Act. Assistant-Surgeons Kellogg and Eno, I proceeded with the operation in the following manner (according to Guérin's plan):—

He was placed in a barber's chair and brought under the influence of chloroform.

I then made an incision from the ala of the nose to the commissure of the lips, following the natural furrow in the skin down to the bone. The two flaps thus formed were dissected from the surface of the bone, until the malar process was freely exposed on one side, and the nasal process and nostril on the other. The lower two-thirds of the width of the malar process was then cut with a pair of Liston's forceps, as near the body of the bone as possible; leaving enough of the process intact to preserve the lower border of the orbit. The corresponding incisor was then extracted.

The division of the soft parts of the roof of the mouth, along the suture, from the last molar tooth to the centre of the palatine arch, was next attempted; but, although the patient was affected by the chloroform to the degree of insensibility, we were unable to open his mouth by any reasonable amount of force, so as to introduce the knife with safety; consequently, that part of the operation was deferred.

One blade of the forceps was then introduced into the nostril, the other being in the mouth; the flat or convex side of the blade was pressed against the septum nasi, and the alveolar and palatine processes were divided at one stroke, care being taken not to injure the palate bone. The convex surface of

the blades of the forceps were then turned upwards, and one blade introduced horizontally through the nostril into the antrum, and swept around under the floor of the orbit, when, with one cut, the bone was divided from the nostril to the upper extremity of the division made of the malar process. The part being excised was now free, except its attachments to the pterygoid process and the palate bone. It was then seized with a pair of tooth forceps and drawn downwards and forwards with a sudden jerk, when its bony detachment was complete. An attempt was now made to sever the soft parts of the roof of the mouth, in front of the palate bone, with a pair of curved scissors introduced from the side; but as there was not room to use them successfully, the excised bone was drawn forward and toward the opposite side, and the parts divided with a small scalpel, which was passed over the bone. This completed the removal.

The hemorrhage was very slight, no ligature being required.

The flaps were carefully drawn together with silver wire sutures. Narrow strips of adhesive plaster were applied between the sutures, and the whole covered with a coating of collodion. This dressing kept the flaps in perfect coaptation, and union, by "first intention," took place.

A compress of lint dipped in cold water was placed in the cavity left by the removal of the bone, and changed very frequently for two or three days.

The wound made by the removal of the bone healed by granulation, without any complications, in about four weeks, except the opening into the nostril, which was frequently touched with nitrate of silver, for four weeks longer. I saw the patient about five months after the operation, when this opening had contracted to about the size and shape of a common field bean.

The cavity left in the mouth was partially filled by granulation.

His voice had a nasal twang, but he could articulate distinctly.

The deformity of feature was scarcely perceptible. The malar and nasal processes and the floor of the orbit being left intact

gave support to the soft parts, so that the outlines of the face were well preserved.

The diseased portion which was removed is now in the Museum of the Chicago Medical College.

Up to the present date (July, 1869), no return of the disease has been observed.

ARTICLE XXX.

HYPODERMIC INJECTIONS IN THE TREATMENT OF SYPHILIS.

By J. SHERMAN, M.D., Lecturer on Orthopœdic Surgery in the Chicago Medical College.

This mode of introducing remedies in the treatment of syphilis is at present creating considerable interest in the profession. Its application in this disease is not as recent as the reading of some articles would lead one to suppose.

Over three years ago, the injection of calomel and glycerine was practiced with success, as regarded the constitutional effect, but was objectional, from the fact of its frequently producing an abscess at the point of introduction. Some other salts of mercury were also employed, but discarded for the same reason. In the spring of 1868, while in Vienna, I had the opportunity of witnessing the treatment of syphilitic skin diseases, by Prof. HEBRA. He was then using the subdermic injection of hyd. chlor. corr., with marked success, in all secondary lesions. Theoretically, one would suppose this preparation more irritating than any other salt of the metal; practically, it is the reverse, it being the only one suitable for use in this manner.

Within the last six months I have treated quite a number of secondary affections by this method exclusively, and have obtained more prompt results than by administration of remedies through the stomach.

During the early stage of syphilis, *viz.:* the period of the presence of the chancre, digestion is in most cases as active as

when the disease is absent. During this time the patient is also more anxious in regard to his condition, and follows more closely the laws of hygeine and the direction of his medical adviser, consequently the anæmia and digestive disturbance is not as marked as in the later manifestations. During this stage remedies by the stomach are well tolerated, and produce results fully as favorable as when the subdermic treatment is used. It is the secondary and later symptoms that yield more promptly to the hypodermic injection.

Then we find our patient often suffering with gastric disturbance, and all the despondency which a return of the disease in another form brings upon those who suppose themselves cured of the malady with the healing of the primary ulcer, the stomach is now needed for the administration of tonics and nutritious food, that the system may gain that strength and tone so necessary for the elimination of any poison. The hypodermic use of mercury has not half the tendency to produce disturbance of the stomach or salivation as when given in the usual method. Its effect is much more rapid, and the inconvenience of administration less to the patient. The amount of hyd. chlor. corr. may vary from one-eighteenth ($\frac{1}{18}$) to one-twelfth ($\frac{1}{12}$) of a grain, dissolved in a drachm of distilled water and injected once every 24 hours. The back, between the scapulæ, will be found the most convenient locality for introducing the syringe.

Here the skin is but little sensitive, and the prominence of the scapulæ protect this point from the contact of the clothing.

A distance of two inches should be selected from the first point for the second operation. The injecting of preparations of iodine have not been found practical, their irritating effects being too great to permit their use.

Special care should be taken to prevent the admission of air at the time of injecting; as it is a frequent cause of suppuration.

81 Monroe Street.

ARTICLE XXXI.

REPORT ON OBSTETRICS.

By H. B. BUCK, M.D., Chairman of Committee.

(Read before the Illinois State Medical Society.)

Mr. PRESIDENT AND GENTLEMEN OF THE SOCIETY:

As Chairman of your Committee on Obstetrics, I have the honor to submit the following report:—I shall premise by promising not to weary your patience with speculative theories, but, so far as possible, deal with such material as results from experience and bedside observation; believing that those theories only are valuable which are based upon closely observed and well ascertained facts.

It will not do, perhaps, to declare with Sylvius, "that nothing must be adopted in medicine that has not been confirmed by the senses;" but I do insist that every theory must be rejected that will not stand the test of practical experience.

There was a time when medicine was defined "the art of healing." May we not be justly proud of the profession of today, when compared with the primitive ages, when such a definition was as comprehensive as the condition of the science would permit? The tender shoot of that day has waxed stronger and stronger—branch after branch hath put forth, until it hath attained even magnificant proportions.

Since the addition of that important branch—hygiene, or prophylaxy, and one still later, which I will denominate orthopedia, and which in its most extended sense contemplates the correction of all deformities, we catch a glimpse of the extended field for observation, and begin to realise the importance of that science which in these later days has for its object the preservation of health, the cure of disease, and the physical perfection of man.

This definition is sufficiently comprehensive for all time to come—this must ever be the final aim of our noble profession.

It may be said in all ages with equal truth: "*Ars medica*

est id quod est propter therapeuticen; therapeutics is the channel through which mankind receive all the beneficent blessings flowing from the science of medicine, whether our efforts are directed to the prevention or cure of disease.

The great question of our lives should be, how can we best prepare ourselves to meet the demands made upon us? I answer that no efforts will more surely redound to our personal advancement than those made for the good of the profession at large.

The keeping of detailed records of cases treated will alone enable us to amass that fund of experimental knowledge necessary for the foundation of even reliable theories—and here I might say, that no addition made has ever stood the test that rested upon other than this as a foundation.

This is the secret of the rapid advance in practical medicine during the past few years; and I verily believe that to achieve even greater successes needs only a combined and more general effort. Of none among the various branches of medicine can this be said more truthfully than the obstetric.

If I lay myself liable to the charge of having made a digression, I can only say, that my object will have been attained if I can so magnify the importance of systematic record keeping, as to induce every member of this Society, in future, to be prepared, when called upon, to add his mite to the general interest of these reports. It is not necessary that some unheard of thing should transpire in order to make an item of interest.

Facts, the accumulation of facts, are what is wanting. It is the multitude of witnesses bearing the same testimony that incontrovertably establish the point.

Your Committee wish to return their grateful acknowledgement to the few among the many invited who have contributed valuable material for this report. The Society will undoubtedly hold them in grateful remembrance.

Several cases of considerable interest have during the past few years fallen under my own observation, bearing upon the causes operating to produce dysmenorrhœa. We meet it among the married and unmarried; and not infrequently find it in the

former the result of the real cause of barrenness. These cases might be appropriately termed organic, in contradistinction to those of a nervous or congestive character, where the most minute examination fails to reveal any structural change.

I always act upon the principle that it is better to avoid the use of the speculum until all other appropriate treatment had been tested, especially among the unmarried; but I am quite convinced that many cases depending upon similar causes and amenable to similar treatment endure years of unnecessary misery and medicinal dosing, through feelings of false delicacy, or our dislike even to suggest the proper treatment.

CASE I. DYSMENORRHŒA.

Mrs. S., aged 21, American, married two years, robust in appearance, and usually enjoyed good health, aside from her menstrual trouble. From the first appearance of her menses, she had suffered intense pain at every period, and had also been subject to great irregularity. The mother stated that when quite young she had several falls, and upon one occasion had fallen astride a fense rail, and had been somewhat injured internally. Was inclined to ascribe all her sufferings to that accident.

I attempted to relieve her sufferings upon several occasions, and was not altogether unsuccessful, but no permanent good was accomplished, other than to correct somewhat the unnatural appearance of the flow. The desire for a family led them to consult me as to the probable cause of delay. Having stated to her previously that an examination might reveal the cause, I found her quite willing to submit to any treatment that might promise success.

Upon examination, I found it difficult to pass Glen's flexible silver probe through what at first appeared a constriction in the cervical canal, upper third. Upon further exploration, I found it to be an exceedingly firm membranous partition, with a small opening at one side. The probe in passing it gave the sensation of extreme firmness.

Ineffectual efforts at passing a dilating instrument occasioned

great pain. I concluded to divide it, and then use the necessary means to preserve a free opening.

Using the probe as a director, with a long narrow blade (edge protected to within a short distance of the point), I succeeded in opening the canal, so as to allow the passage of a moderate sized bougie at once. I then introduced a plug of compressed sponge, with a view to dilate the whole canal, with instructions to remove it if very painful. She could tolerate it a few hours only. On the following day, a similar but smaller plug was introduced, to remain for 12 hours. The bougie was passed daily, until the advent of the next period, which came on without pain, and natural in every respect. I have only to add, this was her last period up to date. She is now nursing a fine boy, some 12 months old.

Case II. dysmenorrhœa with convulsions.

Mrs. B., aged 25 years, American. First appearance of menses at the age of 15 years. Had no difficulty the first year: was caught in a shower three days before her period; caused a partial suppression; suffered severe pain. During the next two years she suffered at times, but not at every period. From 18 years of age she had constant trouble; pain increasing in violence, until spasms supervened, in the spring of 1866. I saw her as consulting physician in one of these attacks, in the autumn of 1866. She married a short time after this attack. I learned that during the winter there was no abatement, but rather an increase in the violence of her attacks. She became weak and emaciated; was hardly able to be out of bed. I was called to attend her in June, 1867; was then having a terrific attack. Learning something of her condition, I took along ether, Richardson's vaporizer, speculum, etc. Introducing the speculum I threw the vapor of ether upon the whole surface of the neck of the womb, for a short period, and leaving the speculum in situ, also vaporized the whole hypogastric region. The effect seemed quite satisfactory. I found that the bladder was distended to a considerable extent. Attendants told me that such was always the case.

After the use of the catheter relief seemed complete. A tolerably free use of anti-spasmodic and anodyne remedies prevented further spasms during the attack. She was very soon put upon the following treatment:—

Ammo. Bromidum internally, combined with a vegetable bitter, and the use of the tepid water douche, twice daily; patient in a semi-recumbent posture, using a small tube and such a quantity of water as to occupy 15 or 20 minutes in the operation. This was continued until the next period. Effect—relief to some extent; did not avert the spasm, but patient suffered much less; same retention of urine, but finally passed it without help. After this attack, the same treatment was continued, with the addition of a mild chalybeate tonic; also used the compressed sponge, to dilate the cervical canal, under the impression that although not absolutely constricted, the engorgement consequent upon the menstrual function so narrowed it as to prevent the ready escape of the flow. Results proved the correctness of my suspicion. She had no serious suffering from that time. The same treatment was continued for several months, more attention being given to the restoration of her general health. She was sent to Michigan, among her kindred and friends; and during the few months spent there improved in flesh and strength.

She still used the douche, but less frequently, for a period of at least 10 months. Her general health constantly but slowly improved. The distress which every period occasioned seemed to grow even lighter, *pari passu*, with her general improvement. She is now in excellent health and between five and six months gone in pregnancy.

I might detail other cases of a similar character, but through fear of prolonging this report beyond a proper limit will desist.

MISCARRIAGE.

It has been a subject of remark among the members of the Sangamon County Medical Society that the present spring has furnished an unusually large number of these cases. One member stated that an Eastern correspondent had called attention to the fact that the same was true of that locality.

How generally it applies, I know not. I have one rather singular case which will be introduced with a query? being unable to account for the phenomenon.

Patient, Mrs. R., aged 25 years, healthy and robust in appearance, second pregnancy, first child vigorous from birth. Was called to visit her at 10 o'clock A.M.: found her with periodical pains, strongly threatening miscarriage. Had her lie down, keep quiet, etc. Upon examination, thought it advisable to give a full dose of morphine. Left, with instructions to report the case if her sufferings increased. Was called in in about 10 hours; found the womb dilated and ready to discharge its contents. Delivered her of a six months fœtus, which had been dead for a sufficient time to show signs of incipient decomposition. The cord was unusually long and coiled like a cork-screw from end to end. *Query.* Did these coils so impede the circulation as to cause its death? The mother remarked that the life motions had never been so marked as in her former pregnancy.

HYDATID.

This case is introduced to show how abnormal conditions of the womb simulate pregnancy, so as to mislead mothers of experience, also to guard physicians against depending upon other than absolute signs of life in diagnosing pregnancy.

Patient, Mrs. C., aged 30 years, mother of three children. Was requested to visit Mrs. C. by her husband, who stated that she was then in labor. I found her suffering periodical pains: said she had been very sick all day, but had suffered severe pain only a few hours. Stated that her waters had burst one hour since, and that she had literally flooded the place.

This was the evening of April 24th, 1869. Upon inquiry as to whether this was the time she had expected her confinement, she replied that quickening occurred about the middle of December. When questioned whether she had felt life ever since, she replied affirmatively.

During this conversation, by placing my hand upon her abdomen, I found that her child had all run to water; but feeling it my duty to learn whether it was a simple hydatid, or dropsy

of an ovum, which might be still there, and, if so, would require removing, I made a vaginal examination. Found the neck firm and resisting, and in such a condition as led me to conclude there had been no considerable dilatation of the os. There was no show of blood. I prescribed an anodyne, with instructions to cease its use upon the cessation of pain. When once quieted, the pain never returned. She was up in due time. The sequel proved it to be an hydatid. I need not add, the family were not a little amazed at the issue of her confinement.

PROLONGED RETENTION OF FŒTUS.

Sometime in March, 1868, I was engaged to attend Mrs. M. in her confinement, which was expected about the 1st of April. She had been guided in her reckoning not only by the disappearance of her menses, but from her quickening, which occurred about the middle of November. A short time before her expected confinement, she accidentally fell, felt sickened at the result, was alarmed, in view of the probable consequences, but was soon able to be upon her feet, as usual. She afterwards stated to me, that from that time, although there was no discharge of any kind, her size gradually diminished. She was kept in a state of continual suspense, until June 28th, when, after a day's work at the wash tub, she was taken sick and sent for medical aid. Her sickness resulted in the expulsion of a fœtus, much shriveled, but not putrescent, and in size about the average for a six month's gestation. She recovered without any untoward symptom.

RUPTURE OF UTERUS.

By request, the following very interesting case is furnished by Dr. C. E. Parker, a practitioner of thirty years' experience, late from Beardstown, Ill., and now (having retired from the profession) a citizen of our own city:—

Was called August 9th, 1862, at 2 o'clock P.M., to visit Mrs. R., residing about twelve miles from B. Mr. R. stated she had been in labor during the night, in charge of a neighboring midwife, who at noon reported "a portion of the child born, and something wrong." Arrived at 3½ P.M.; found the patient

upon her back, in nearly a sitting position, chest flexed upon the abdomen; lower limbs drawn up. She reported her labor as having been very severe up to 11 o'clock, at which time, after a very violent expulsive effort, "something seemed to give way; all pain ceased, and a strange sickening sensation followed." The hand of the child protruded at 9 o'clock A.M. On manual examination, found a mass of material protruding, consisting of child's arm, a portion of placenta, and a large mass of something which I never met with before. On occular examination, found a large mass of the intestines protruding from the vulva; the partially expelled placenta was easily withdrawn; the hand cautiously introduced, the intestinal coils pushed up before it; found the child in the abdominal cavity; the left foot directly under the liver at its upper portion; the right on the opposite side of the abdomen; cautiously drawing them together, version was gradually produced; the arm slowly returning as the feet were drawn down. The body of the child was extracted readily, but the head brought down a large mass of the intestines, which were with difficulty returned and retained. On minute examination, found a rupture of the uterus on its left posterior lateral portion, the rupture extending through the os tincæ and a portion of the vagina. Allowed her to remain in the same position until all drainage had ceased, then placed her in a horizontal position, hips much elevated, and applied bandages and compresses, calculated to prevent further protrusion of the intestines, and ordered them to be kept saturated with cold water. Gave an opiate, and left her, supposing the injury in itself sufficient to produce death—my manipulations making that result only more certain. The next day Mr. R. called upon me to visit her again. My engagements, the distance, and extreme heat, prevented. Gave him a note to Dr. P., a very worthy and scientific practitioner, residing only three miles from the patient, requesting him to visit her and do all in his power to make her comfortable. On the 12th, received a note from Dr. P., desiring me to meet him at Mr. R's. Found her quite comfortable, and desirous of sitting up. The question for decision, the admissibility of a cathartic. Ex-

amined, could detect the fissure in the vagina and os tincæ, but the union seemed firm, but little abdominal soreness, and no pain, except when turning in bed, which the temperature, 98° above, rendered frequently necessary. The cathartic operated kindly, and she was up and about as early as in her six previous labors. Sometime during 1865, she was safely delivered of a child without assistance, save what was rendered by neighboring women. This fact is vouched for by a lady who knew them intimately, and had seen the child repeatedly. I learned this but a short time since, they having removed to a neighboring county some distance, and I having left B. and the profession. In its first phase, I consider the case unique; in its second, I have never heard its parallel.

The following case is kindly furnished by Dr. J. T. Frazer, Howard's Point, Illinois:

In this case there seems to have been a rudimentary brain only, not enough perhaps to render inappropriate the term anencephalus.

"Was called to attend Mrs. R., on March 29, in seventh labor. All former labors natural and without difficulty, except the sixth. Found pelvis and genitalia ample, os uteri but partially dilated, membranes extremely tense and enormously distended. Could not make out presentation, but believed from external configuration that I had a transverse position to deal with. At length the membranes gave way, and I immediately ascertained the presentation to be the upper dorsal spine and posterior of left scapula. Passing two fingers over the shoulders, one on each side of the neck, pressed the breech, etc., towards the left ilium. The head (rudimentary) took the place of the spine and scapula, and revealed the character of the monstrosity. The birth was effected without difficulty."

In describing the fœtus the Doctor states, that although the face was there, the features were badly formed and illy proportioned. For want of space to give minute details, I will only add, that the bones of the base of brain were tolerably well represented, but a complete absence of those forming the vault of the cranium.

Posteriorly there was no brain at all; but extending from one mastoid process to the other, there was a soft liver-like but fibrous substance, and beneath this, representing the cerebellum, was a softer fibrous material of a lighter color. The child did not breathe. The specimen could not be obtained.

The Doctor adds, that this is the fifth case coming under his notice in a practice of 49 years. Three in his own practice (one of which is now in the Museum of the Jefferson Medical College, Penn.), and two inthe practice of a friend.

The following cases, replete with interest, are furnished by Dr. S. R. Crawford, of Monmouth, Illinois:

Case I.—Was called to Mrs. B., in consultation with my friend, Dr. C., June 14th, 1866, and was informed by him that his patient had been suffering severe labor pains for more than 36 hours, without the slightest apparent progress. On making a digital examination, per vaginum, found the os uteri high up in the superior strait, not dilated to any extent whatever, and seemingly not dilatable. The patient, a blonde of a short, stout frame, perfectly developed osseous and muscular systems, 30 years old, and the mother of four children. She informed me that there was no difficulty, and but little delay in her former confinements, that she had no such unbearable pains then as now and in consequence of which she was apprehensive that some insurmountable difficulty stood in the way of successful delivery, and wanted to know how soon I thought she must die. I assured her that nothing was wrong, that she was not now quite ready to be sick, and that there was no good grounds for such uneasiness and apprehension, and advised her physician to administer a good opiate; in response to which she quieted down and slept a few hours, and waked up feeling quite comfortable, and had not the slightest feeling of pain until at the end of seven days from that time she was seized with labor pains, and in a little less than an hour was delivered of a fine, lively female child, weighing between nine and ten pounds; after which she made a speedy recovery, with no peculiar symptoms whatever.

Case II.—May 28th, 1868, was called to see same lady, and found her suffering from the same kind of false pains as before,

which kindly yielded to same course of treatment. My patient was comfortable until June 10th, when I was summoned to her, and delivered her in a few minutes of a fine, healthy girl.

I select this case from a considerable number I find in my note book, not for any intrinsic peculiarity in it, but as illustrative of what I consider a rheumatic condition of the gravid womb, developing false pains as gestation approaches completion, resulting in those false alarms, which to the busy practitioner become so contemptible, and which so often bring down maledictions on the heads of accouchers, whose sole crime is good-naturedly and contentedly remaining a day or two awaiting results. A careful examination will generally give a full comprehension of the situation; and in the face of that nefarious phrase, "meddlesome midwifery," when false and spurious pains are suspected, I always give and advise my pupils and young medical friends to give due regard to that suspicion and act accordingly.

CASE III.—Mrs. T., a stout German woman, aged 33 years, mother of five children, consulted me Sept. 1st, 1867, concerning herself. She was eight months gone in pregnancy, had noticed nothing unusual until the end of five months, when, on a Sunday, she had gone a few miles into the country in a lumber wagon, and in the evening, after her return, commenced flowing somewhat profusely, and continued, with intervals, in some decreased amount all night, the severity at no time inducing her to call for medical aid. The flowing ceased in the morning, and, with the exception of a feeling of weakness and debility, she felt as well as before. She had no pain at any time. She insisted that she had grown rather smaller than otherwise from that time forward. She followed my advice and gave herself no further trouble about the matter. Two months subsequently I was called, and, after a somewhat protracted and irregular labor, she was delivered of a mass of considerable size, which proved to be the unbroken membranes, containing a small amount of liquor amnii, and a fœtus of as nearly as could be judged of five months development, shriveled and withered in aspect, but not to any extent putrescent. The

maternal extremity of the umbillical cord ended in a small, irregular shaped knot, evidently the debris of what was once the placenta, but which was detached at the time of the flowing, five months prior to confinement. Nothing can convince her but that she had been pregnant ten months.

Case IV.—Was called to Mrs. C., January 30th, 1868, and found her suffering from brisk labor pains. There was a breech presentation, and after a severe labor of three hours duration she gave birth to a living child, with a gaping fissure extending from the nape of the neck to the coccyx, having the appearance of a ragged wound. There was no spinal column to be found. Breathing continued twenty minutes.

Case V.—Was called August 10th, 1867, to attend Mrs. B. in her sixth labor. A half dozen heroic pains expelled a male child, which, after it was dressed, weighed twenty pounds. Mother and child did well. The little fellow at present is not above the average size. The mother is a large, burly Virginian, and the father, without any considerable amount of obesity, will weigh two hundred pounds. I have been unable to find on record any equal in weight to this child.

N. B.—For remainder of report, see manuscripts (original) of Dr. N. Wright, Chatham, Ill., and B. H. Cheney, Joliet, Ill., appended.

The following is kindly furnished by Dr. N. Wright, of Chatham, Illinois:

I was called to Mrs. ——, on the 8th of March last. Was told by her husband that she was in the sixth month of her pregnancy, and that he feared abortion was about to occur. He told me further that she had aborted twice previously. I found her with the pains increasing in severity, recurring regularly, and assuming all the characteristics of ordinary labor pains. Upon examination the mouth of the womb was found dilated to the size of a dollar piece, and a fleshy mass was detected protruding through it. In an about an hour she was delivered of a large mole, weighing, perhaps, four or five pounds. The pains were

equal in severity to those of an ordinary labor case, of course excepting those caused by the distention produced by the passage of the child's head. Pure contractile pains are perhaps nearly always equal in severity.

No unusual amount of hemorrhage took place. This mole, in its general outline, bore some resemblance to an afterbirth, being of a fleshy nature. It was studded with little bladder-like bodies, varying in size from a pin's head to a quail's egg. They were of a whitish aspect, the walls were thin, of a fibrous nature, and filled with a thin, serous fluid. An almost infinite number of these cysts existed throughout the mass. This was diagnosed a hydatiform or vessicular mole, or, vulgarly, a false conception—the vessicles resulting from a transformation of the cells in the villi of the chorion, as maintained by Paget and others—this disease, or degeneration of the placenta, producing the death of the embryo, by deranging and cutting off its nutrition. Dr. Graily Hewitt, on the other hand, reverses this order, and contends that the death of the embryo, from some causes, brings about this peculiar change in the placenta.

PLACENTA PRÆVIA, AND OTHER CASES.

Reported by B. H. CHENEY, M.D., of Joliet, Ill.

Three cases of placenta prævia have recently occurred in my practice; a much larger number proportionally than is usual. The cases present nothing remarkable either in their pathology or treatment; still, the nature of this dangerous complication of labor is always of such interest and importance that they will perhaps bear a brief rehearsal.

PLACENTA PRÆVIA LATERALIS.

CASE I. Mrs. B., aged 34 years, multipara, American, temperament leucophlegmatic; no hemorrhage in previous labors. A midwife attended her in her present confinement. I subsequently learned that there was considerable hemorrhage at the commencement of the labor, but that it soon ceased; the pains being frequent and strong, and the delivery rapid. As

soon, however, as the child was born, alarming hemorrhage again set in, and a physician was sent for in great haste. The child had been born some 15 minutes when I reached the house. Found the patient bloodless; lips as pale as her cheek; respiration extremely faint and scarcely perceptible; pulse imperceptible at wrist, faintly perceptible over heart; flooding profusely. On examination, found umbilical cord had been torn off at its placental insertion by the midwife's traction upon it. About one-fourth or one-third of the placenta was lying unattached over the os; the remainder firmly adherent to the left wall of the cervix. I at once detached it, as is usual in such cases, by passing the fingers under it, being careful to secure and remove the whole organ. Then dashing ice-water, at once, upon the abdomen, the uterus promptly contracted, and hemorrhage ceased. Brandy and ammonia were given at short intervals, to the first dose of which a portion of ergot was added, as a precautionary measure. At the end of two hours, patient showed signs of returning consciousness, and from that time continued to improve. Recovered; child living.

The history of this labor is what would have been expected under the existing conditions. There was some flooding when the dilating pains detached that portion of the placenta immediately over and around the os; but the presentation was, fortunately, natural, the uterine contractions frequent and strong, and the labor quick: the child's head, by its pressure, assisted in arresting the incipient hemorrhage, which, however, of course, returned at once on the birth of the child and the cessation of uterine contraction. I neglected to ascertain if any hemorrhage had occurred in this patient during the latter part of her pregnancy. If so, it must have been so slight as to excite no alarm, as no physician was consulted.

PLACENTA PRÆVIA CENTRALIS.

Case II. Mrs. G., aged 37 years, Irish, robust and stout, temperament bilious, multipara. Previous labors natural.

August 18th. Was called to stop an attack of flooding; patient not expecting her confinement for two weeks or more. Some four weeks ago, had an attack of hemorrhage, which has

recurred from time to time since. Present condition—pulse regular; respiration good; loss of blood considerable, but not alarming; no sign of commencing labor; os uteri so closed that I could not diagnose whether this was a case of placenta prævia or of detached placenta. The clinical history, however, led me to presume the former. Prescribed rest in recumbent posture, cool drinks, acid. sulph., etc.

August 21st. Was called at 7.30 P.M. Waters had broken at 4 P.M. Os uteri dilated to size of a quarter dollar piece, extremely rigid. Found the placenta attached directly over it; the pains very irregular, undecided, and inefficient, but the hemorrhage alarming, and patient prostrated. Used ice locally, and gave ammonia and whiskey. Dr. A. W. Heise in consultation. The os being still rigid, with no contractile pains, and flooding continuing, we decided to remove the placenta, at once, if possible. Found it to be central; os so rigid that only pieces broken up could be removed at a time. Removed as much as possible, and inserted tampon. One and a-half hour later profuse flooding. Removed tampon, and more of placenta. Os still rigid: no contractile pains. Presentation—left shoulder, with elbow down, back of child anterior.

On further consultation, determined to administer chloroform to relax the os, and enable us to turn. Patient has been taking whiskey constantly; to the last two doses of which was added fl. ext. secal. cornut. Administered chloroform at 2 A.M. Dr. Heise turned, bringing down feet. Allowed patient to come out from anæsthesia, and repeated whiskey and ergot. Beginning traction, slight labor pains came on, and labor was completed with no difficulty. Removed remaining pieces of placenta and blood-clots from uterus, and applied ice-water to abdomen. Contraction took place, and all hemorrhage ceased. Child, of course, stillborn. Mother, although exhausted by fearful loss of blood, recovered, with no untoward symptom.

The prominent features of the above case—the rigidity of the os, the total absence of contractile pains, etc.—render the reasons for attempting to detach and remove the placenta, as the first procedure, so evident, that it is not necessary to state them

in detail. My limited experience and my judgment would not lead me to adopt, as a general rule, the plan so strongly advocated by its able and distinguished proposer, Prof. Simpson, of Edinburgh, *viz.*, that of artificial detachment and delivery of the placenta before the child. Still, I am aware that the Professor does not recommend this as a method applicable to all cases; and there may be some in which it will be found feasible, if not advisable. Believing that the hemorrhage proceeds from the bloodvessels of the uterus (the utero-placental), and not, unless secondarily, from those of the placenta, the indications above all others seem to be—1st. To empty the cavity of the womb; and 2d. To secure its permanent contraction. The test of clinical experience, and not theorizing, is to decide by what method these results can be quickest and safest attained.

PLACENTA PRÆVIA CENTRALIS.

Case III. Mrs. D., aged 22 years, multipara, German, leucophlegmatic, actress. Was called at 10 A.M. Found patient at beginning of labor; pains weak and inefficient; flooding with each one. On vaginal examination, found os nearly dilated, soft, and yielding; placenta attached directly over mouth of womb; presentation, cephalic. Pains had begun only about an hour previous. The hemorrhage was increasing, and the patient rapidly losing strength. Accordingly, in the presence of Dr. Harwood, who was called in counsel, I introduced the hand; and, finding it would be difficult and occasion loss of time to get around the placenta, as is usually recommended, I passed directly through it, turned, and delivered at once by the feet, removing the placenta immediately afterwards. Cold water to the abdomen at once induced contraction of the uterus, and the hemorrhage did not recur. The whole delivery did not occupy five minutes, but the child was *in articulo mortis*, gasping but a few times. Persistent efforts and trial of every means for its restoration, for three-quarters of an hour, were wholly unavailing. Mother recovered well and rapidly.

Placenta prævia is variously estimated by different authorities to occur from 1 in 500 to 1 in 1000 cases. The average of

statistics, from various sources, give as the result 1 in 3 of the mothers, and over ½ of the children lost. The resort, in these cases, to premature delivery, as a prophylactic measure, as recommended by Prof. Thomas (*vide American Journal of Obstetrics*, for May, 1868), would, doubtless, materially diminish this mortality. As Dr. Thomas says: "By resorting to this measure, we should be dealing with a woman who is not exhausted by repeated hemorrhages, the obstetrician would be in attendance at the commencement of the labor; and he would be able, by hydrostatic pressure, to control flooding, while the same pressure accomplished rapidly and certainly the first part of the labor."

The case of Mrs. G., No. II., is one in point. Premature delivery, by the use of Barnes' dilators, would very probably have prevented the occurrence of such profuse hemorrhage, and its attendant dangers.

Dr. Thomas, in the article referred to, gives as the reasons for the great mortality in placenta prævia—1st. Hemorrhage, occasioned by dilatation of cervix; 2d. Repeated hemorrhages, occurring during ninth month; 3d. Profuse flooding at commencement of labor. To these, it seems to me should be added the unusually large proportion of unnatural presentations which occur in this complication of labor, rendering the introduction of the hand and turning necessary, aside from the malposition of the placenta and the hemorrhage.

LATENT METRITIS. (?)

Mrs. H., aged 38 years, multipara, Irish, bilious habit. This patient lived five miles in the country; and I was not called until she had been in labor 14 hours. On arriving at the house, found delivery completed, and patient in very favorable condition. Left her with a few general directions. On the fourth day thereafter, the husband came to town, and informed me that his wife was "not doing well;" lochia were suppressed; had fever, etc. Prescribed a poultice of flax-seed and camphor to vulva, warm applications, etc., laxatives, and spts. mindereri. Fifth day, no better; was asked to visit her. Found her with

no fever, pulse regular and soft, skin moist and natural. Bowels had moved; urine passed freely; no abdominal tenderness; whole condition except suppression of lochia, apparently favorable. Vaginal examination revealed nothing abnormal; parts were not heated nor dry; nor was there any indication of inflammatory action. Lochia completely suppressed since third day, on which, I now learned, she had been up and about her room a good deal, having no one to attend her. Lacteal secretion good and abundant. The patient was firmly persuaded that she was going to die. Her mental condition was much like that in hysteria, without the convulsive seizures; a state of perfect *melancholia.* She was convinced that her husband and his brother were determined to poison her, and would take neither nourishment nor medicine from them. The hygienic conditions in her surroundings—room, attendance, etc.—were as bad as they could be. On the eighth day, at evening, she jumped from the bed, and seizing her brother-in-law, shook him violently; whether aggravated thereto, or simply from frenzy. I could not learn. This was the only approach to convulsion which she manifested. Saw her at midnight. Heart's action was then quite irregular; frequent cessation of pulsation, etc., but no sign of organic disease. Excessive wakefulness had been a prominent symptom. Persuaded her to eat some beefsteak and bread, and drink some tea, after which she had a natural and refreshing sleep of two hours. She had for several days persistently refused all nourishment, except a few dry crackers, and had no sleep for two days and nights. She awoke in the same state of profound melancholia, and continued in much the same condition—refusing, finally, to take anything at all, nourishment or medicine; sitting moody and silent, or muttering to herself—until the twelth day, when she died.

Although a firm persuasion of the certainty of death is, in any disease, almost enough to ensure its fatality, or, perhaps, existing as a consequence, shows that a fatal issue is to take place, yet, this conviction alone is not enough to *cause* death. There must, therefore, have been some pathological condition behind all this. I do not pretend to decide what it was, but

have ventured to suppose that it might have been a latent developed metritis (what our German brethren would term *dunkel ausgesprochen*), consequent upon suppression of the lochia, and producing a toxæmic condition. A *post mortem* might have decided this point, but could not be obtained. Cases of puerperal mania, resulting from the same cause, and manifesting symptoms similar to the above, have, doubtless, occurred to almost every one engaged in obstetric practice. Their true pathology seems to be not well understood. There is, probably, some depravation of the blood connected with it.

ATRESIA VAGINÆ.

N. H., aged 3 months. The mother informed me that a few days after the birth of this infant she noticed a "string of clotted blood" between its labia vulvæ, and on looking more closely found no appearance of any vaginal orifice. I found, upon examination, the parts normal in every respect, except complete occlusion of the vagina; its site being covered by skin in no way different from ordinary integument, except that it was lighter, and marked perpendicularly by a faintly perceptible raphé. The clotted blood spoken of by the mother, and the existence of the raphé, led me to conclude that this occlusion was traumatic, and not due to any error of development; and, further, that the vagina probably existed normally behind this wall of integument. I accordingly divided it with a bistoury, and gently introducing a female catheter a short distance, found the canal pervious, as I had anticipated. A tent introduced to prevent reunion of the edges of the wound completed the curve.

Had there been complete imperforation of the vagina in this case, I should, of course, have advised to defer any operation for reöpening the canal, or forming an artificial vagina, until the occurrence of puberty should have demonstrated the existance of ovaries, and accumulation of menstrual fluid the presence of a uterus.

It is difficult to assign any cause which could operate *in utero* to occasion traumatic closure of the vagina. The skin was, however, too perfect to have grown in the few days following

the child's birth; and, on the other hand, the presence of the clotted blood is difficult to account for, if the deformity be presumed to be congenital.

Dr. A. W. Heise, of Joliet, has related to me, from memory, two cases of interest, of which the following are the leading features:—

ARORTION AT FOURTH MONTH, FOLLOWED BY PREMATURE DELIVERY OF SECOND FŒTUS AT SEVENTH MONTH.

Case I. Mrs. C., aged 32 years, German, mother of four children. Landed in the U. S. three months since. The husband of this woman called upon Dr. H., and requested him to prescribe for his wife who was flooding. On visiting the patient, found her apparently threatened with miscarriage; abdomen enlarged, as though pregnant. The patient, however, stoutly maintained that she was not, and could not be, pregnant; stating that, three months previously, on the passage across the Atlantic, she had miscarried with a fœtus of about four months, according to her own calculation of her pregnancy, and to the statement of the midwife who attended her upon shipboard; that she had herself seen the child after its birth, and there could be no mistake about it; that she had been flowing, more or less, at intervals, ever since, and had had no sexual intercourse since that time. The Doctor accordingly concluded that this was a case of retention of some of the secundines, or of polypus, or mole. The woman was having expulsive pains, and, upon vaginal examination, the Doctor discovered a mass advancing, though he did not recognize the part presenting sufficiently to diagnose what it might be. The patient was soon delivered, however, of a fœtus completely doubled upon itself in emprosthotonos, the convexity of the spine presenting. The fœtus was apparently of the sixth month, and partially decomposed. Granting the correctness of the woman's statement, in reference to the previous abortion, the present fœtus must have lived two months after the birth of its twin. No examination was instituted as to the existence of a double uterus.

TRAUMATIC ATRESIA AND IMPERFORATION OF VAGINA.

CASE II. Mrs. A., aged 20, primipara. Dr. Heise was asked to visit this case in consultation with Dr. Bacon, of Lockport. Patient had been 24 hours in strong labor, with no progress. Dr. B. stated that he had not been able to ascertain the presentation, as he could not introduce the finger into the vagina. Dr. H., attempting an examination, found the canal completely occluded by a tense, firm membrane, about one-third of an inch from its external orifice. There was a small opening, sufficient to admit a good-sized probe, at the upper or pubic part of this membrane, but no justifiable force could make way for the finger. Through this opening the waters had discharged some 10 or 12 hours previously, since which time the patient had been in strong labor, with constant expulsive pains. The husband being asked if he had ever had complete connection with his wife, replied that "he had," but on being questioned closer, stated that he "had some time ago, but not recently." On being pressed for his knowledge of any cause for her present condition, he acknowledged that he had been married only about two months, that he had had sexual intercourse with his wife some time previous to their marriage, that finding herself *enceinte*, they had procured the services of an abortionist, who had operated upon her for 15 minutes with a wire, and pronounced the operation complete; that after this operation she was sick and confined to her bed for six weeks, purulent and bloody discharges taking place from the vagina.

Inasmuch as the passage of a probe through the orifice in the membrane showed a cavity beyond it, Dr. H. hoped it might be the only obstruction. On dividing it, however, he found still others, in the form of fibrous bands, stretching obliquely across the vaginal canal, interlacing with each other, the whole length of the vagina, and very firm and strong. Carefully dividing these, the fœtal head was plainly felt in the first position, and the patient was soon delivered of a healthy child. Severe inflammation of the vagina, womb, and peritoneum supervened, and she died on the ninth or tenth day thereafter.

ARTICLE XXXII.

BROMIDE OF AMMONIUM AS AN ANODYNE.

By C. N. COOPER, M.D., Cresco, Iowa.

Mrs. B., aged 28, gave birth to her first child on the morning of July 6th, after a tedious labor. Her attending physician ordered salts to move her bowels. Salts were given, but with no effect. Friday evening, Dr. C., of this place, was called, and requested me to see the case with him. Patient complained of severe pain in epigastrium. Dr. C. gave Dov. pul. freely, with no effect. He then tried morph. and chloroform, but she became worse. By his request I injected morph. gr. ¼ into the arm, which quieted her at once, but the relief was only temporary. A free enema gave relief, which it was hoped would be permanent. Oil was administered on the following morning. Opiates were ordered to be given freely if the pain returned. At noon her distress was very great, and the opiates had no effect. I was called at once. She was now not only suffering the pain spoken of, but at nearly every breath there was spasmodic contraction of the diaphragm and abdominal muscles over the epigastrium. I gave morph. gr. ⅙, br. ammo. gr. viij, and spr. ammo. ar. gtts. xv. In a few minutes she said she felt different, but still some pain. I ordered the same to be continued every half hour till relief, which followed the fourth dose. I visited her in the evening and found her comfortable and happy. July 11th, patient doing well, no pains, except slight discomfort, shifting back and forth between stomach and uterus. She has had no more trouble. I cannot say whether the relief was due to the bromide alone, or its combined action with the morphine. My opinion is that the bromide relived *nervous irritation* and *assisted* the morphine in relieving the pain.

Foreign Correspondence.

R. R. Allgemeinen Kraukenhause,
Vienna, *July 3d, 1869.*

Dear Examiner:—Some time since I gave a somewhat detailed account in your columns of the opportunities and methods of studying Surgery, Obstetrics, etc., in Vienna. Most of the other branches of the science are studied in a somewhat similar manner, and it may be proper to give them a more cursory consideration.

The clinics on internal medicine are given by Professors Oppolzer and Skoda, in the wards at the bedside. It is much to be lamented that amphitheatres are not provided, and better opportunities given to students for hearing these wide-reputed men. Prof. Oppolzer has probably upwards of two hundred students at his clinics, about thirty of whom surround the patient, and are able to hear the learned man's lecture. A large part of the class, however, hear nothing, wander up and down the wards, talk with the patients, or each other, read newspapers, perhaps hear a word occasionally, or arrange themselves about the bed of the next probable patient. For a foreigner, with an imperfect knowledge of the language, it is hardly worth while to attend these clinics, unless he be a *Frau* doctor, to whom a front position is accorded, as is the case with a young lady from New York. Each patient's history is noted by some one of the students from day to day, who reports the case when called upon, and is often subjected to a close questioning on the whole scope of the disease. All the lectures I have heard were given in one male ward of about eighteen beds. I understand lectures are sometimes given in the female wards.

The assistants of these professors give private courses through the semester on laryngoscopy and rhynoscopy, percussion and auscultation. Their classes are generally limited to twelve, and are provided with abundant material.

These courses continue from four to six weeks, with a fee of $9.00 each.

Drs. Benedict, Fieber, and Rosenthal give courses on electricity, with explanations of the machines, and applications of the element to patients. They are thorough students of this branch of therapeutics, which plays an important role in the hospital. Dr. Benedict's book on the subject is one of the latest and best books published. Not enough attention is yet given to this branch in America.

Private courses on the ear are given by Drs. Gruber and Politzer, who have abundant anatomical preparations to illustrate their lectures, also a sufficient ambulatory. Students are supplied amply with mirrors and speculi, and allowed to examine patients and apply the air douche and other remedies. Gruber has an ambulatory of from ten to forty patients daily, and in many respects affords superior advantages to Politzer, whose ambulatory and supply of instruments are smaller. In most cases Gruber introduces the catheter into the eustachian tube, and so inflates the ear; while Politzer generally introduces a shorter tube simply into the cavity of the nose, and applies the douche. In other respects their treatment is pretty much the same. The respective claims of these two methods I have not space to consider. Dr. Mathewson, of Brooklyn, has been translating Politzer's Monogram on the Tympanum, I believe, which will probably soon be in the hands of the profession.

Professors Arlt and Ed. von Yäger have charge of the Eye Department. Each has from sixty to eighty beds, and a large number of out-patients. Candidates for graduation are only required to attend Arlt's clinic, hence Yäger is mostly followed by foreigners, as the clinic is not crowded. Concerning Arlt's clinic, I translate a few lines from a pamphlet, written and published by some of the students. "It is truly laughable to find the operation hall for ophthalmic knowledge a two-windowed room, in which stand six partly straight and partly half circular benches, which altogether, according to numbers, represent forty-nine places; when it is known that for these lectures, during the last semester, 130 to 150 students were inscribed. The old portraits on the wall show sufficiently that the room, in times gone by, was devoted to the eye clinic, times, however,

in which the number of students of medicine did not reach 1058." I quote a few more words in a foot-note: "For a demonstration, since how long a time no reorganization has been made by the faculty, corresponding to the conditions of science, the following yet existing law (1869) may serve. It says: 'No professor of obstetrics shall undertake an operation in his clinic without first having obtained the approval of the head midwife.'"

Yäger's clinic is from 8 to 10, and Arlt's from 10 to 12 A.M., thus enabling those who make the eye an especial study to devote the whole forenoon to patients. About 8000 eye patients are treated yearly.

Their assistants give private courses on opthalmoscopy, refraction and accommodation operations, etc., and afford fine opportunities for gaining a knowledge of these topics.

Prof. Hebra's clinic for skin diseases is mostly attended by foreigners, who pay a double fee, $15.00. He treats about 4000 patients yearly. Male house patients are divested of their entire clothing, and pass about the class. Female patients are not required to expose the genitals.

Private courses are also given by his son-in-law, Dr. Köhn. Also by Newman, who has recently written a book on skin diseases, of some value. Also by one or two other men.

Prof. Sigmund gives three or more courses, of six weeks each, during the year, on venereal disease.

His assistant gives some private courses. Males and females are stood nude, on benches, to be examined by the class. The professor speaks very fast, and frequently considerable portions of his lectures are in Latin, so that the unclassical scholar, with also a poor knowledge of the German, learns little more than he sees.

Courses are given on pathological anatomy, for which the *post mortems*, averaging perhaps six per day, afford abundant material.

Other courses on microscopy, histology, etc., are given by the assistants of Rokitansky, who furnish instruments and other apparatus.

There are also courses given on anatomy and pathology of the brain, insanity at the asylum, urinalysis in the laboratory, which are said to be good, but I have not been able to take them, or visit them. Rokitansky lectures daily; but few Americans go to hear him.

Many of the hospital wards are miserably ventilated, and crowded. There is only one general bath-room for the whole hospital. Numbers of patients lie in their beds for weeks in a state of uncleanliness and almost filth, inconsistent with health or decency. In some of the wards they are disturbed at all hours of the day by private courses, and scarcely procure necessary rest. Many of them are required to sacrifice too much for the student. Some of the students seem to think patients are simply here for their benefit, and treat them accordingly.

Students beginning the study of medicine had better do so at home, or elsewhere than here, as the conveniences for such study are not at all equal to the number of students; *e. g.*, nearly two hundred of the students of physiology are obliged to stand during the lectures. The arrangements for anatomy and chemistry, I understand, about the same.

Hastily, F.

Selections.

THE TREATMENT OF SUMMER COMPLAINTS BY THE BROMIDE OF POTASSIUM.

REMARKS MADE BEFORE THE MEDICAL SOCIETY OF THE COUNTY OF NEW YORK, JUNE 7TH, 1869.

By SALVATORE CARO, M.D.

"Nihil est in intellectu quam prius fuerit in sensu."—ARISTOTLE.

MR. PRESIDENT and Fellow-Members of the Medical Society of the County of New York.

The paper which I am about to read before you and submit to your sound judgment, is not intended to destroy theories which have been adopted for a number of centuries by the profession generally, nor to create new ones, but simply to present you

with facts that to me appear of great service to science and to humanity at large; particularly to those helpless beings concerning whom the question was lately raised, by a member of this distinguished body, as to the causes of their mortality. I have entitled this paper *The Treatment of Summer Complaints by the Bromide of Potassium.* Possibly the proper name would have been *Cholera Infantum;* but since adults as well as infants are sometimes troubled with these complaints, and have been cured by the same remedy, I concluded to adopt the former title.

Before entering the field of practical observations, permit me briefly to describe the causes, symptoms, and end of such a complaint.

Causes.—Heat, cold, and dampness, separately or combined, have a great tendency to produce diarrhœa and dysentery. Low, damp ground, badly ventilated and crowded apartments are sure to create this disorder. In the summer season it is supposed to be epidemic, coming in the other seasons only in a sporadic form. I have invariably found that the exposure of babies to night air, when affected with bowel complaint, aggravates the symptoms. The bathing of infants, either by sponging or immersion, whilst in a state of perspiration, is one of the most terrible causes of this affection. Atmospheric heat is the first cause of summer complaint. Its action upon the human body is peculiar, particularly in children, the external surface of the body being generally cooler, and the internal parts warmer under its influence.

Its first effects are to produce cutaneous perspiration, and to render more active the hepatic function, as has been clearly demonstrated by Dr. Jas. Johnson (*On Tropical Climates.* "The sympathy between skin and liver, under varying conditions of external warmth.") Whatever may be the explanation of the facts, we know by experience that high atmospheric heat, long continued, has a marked action upon the liver, increasing and altering the quality of the bile, not unfrequently producing inflammation of itself, and, through its protracted continuance, affecting the bowels and giving rise to vomiting and diarrhœa.

The skin and liver are not the only organs affected by heat. From the imperfect consolidation of the cranium, the sun's rays readily affect the brain, suddenly and extensively influencing the nervous system. To cite a familiar instance of this, in summer days we frequently see in the street or in the horse cars, a healthy baby exposed to the sun with uncovered head, commence vomiting, without any cause referable to the stomach. Until the sixth or seventh year, the brain being but imperfectly developed, the spinal system predominates over the cerebral,

and this accounts for the predisposition to reflex action upon the stomach and digestive organs. When either the brain or spinal system is affected, exhaustion undermines the feeble vital powers of the child, producing a general relaxation of the intestines, attended with vomiting, diarrhœa, and hydrocephaloid symptoms.

The infant requires proportionately more food than the adult, having not only to repair the daily waste but also to provide for growth; and yet its digestive organs are weaker. To this we may attribute the constant disturbance of the child's stomach and bowels, particularly when fed with unhealthy food. To prevent this disorder the child should be nourished from the mother's breast; or, if deprived of this, by cow's milk, until the stomach has altered in form, gained greater muscularity, and, together with the other digestive organs, the power to assimilate food of a different nature. Until the appearance of the first molar tooth, the child should have no solid food, but be made to depend upon the mother's breast or its substitute.

Nausea and vomiting are the most common symptoms of indigestion during infancy. The vomiting of indigestion must be distinguished from the regurgitation which occurs without nausea, simply from an overloaded state of the stomach, where the mother has a great flow of milk, and the child partakes too freely. This regurgitation is not to be taken as a symptom of indigestion, but many times it is the cause of great disturbance to the child's digestive functions, by the frequent loading and unloading of the stomach; it should therefore be prevented. If what the child vomits after nursing is coagulated, with sour smell, indigestion is the cause. It is accompanied by griping pains, and immediately afterwards by sour and scanty evacuations. The coagulated milk, unless either digested or vomited, will be the cause of great pains, gastric inflammation, and diarrhœa.

At all ages, children that are weaned are more subject to indigestion, especially when fed with stimulating and indigestible food. The symptoms are then more severe. Vomiting of undigested food, with alvine discharges of a similar nature, are more frequent, and colic pains more violent. The child's appetite is increased; he eats with avidity and in great quantity; but the food is past almost unaltered, affording no nourishment to the system. He grows fretful, the brain becomes disturbed, convulsions often appearing; finally he dies of anæmia. If the cramming of the stomach is the only cause of the indigestion, and consequent bowel complaint, we should first remove the causa morbi, either by an emetic or an antacid, and then regulate the

diet; under this simple treatment the child will recover. But, if the presence of the undigested food has produced a certain degree of disturbance in the hypogastric and solar plexuses and large semilunar ganglia, with their nervous supply to the vessels and viscera—the fons et origo of the disease known as cholera—neither emetics, antacids, nor opiates will relieve the sufferer as efficaciously as the bromide of potassium.

There is a still more formidable cause of summer complaint—dentition—which begins on an average, from the sixth to the eight month, terminating at the twenty-fourth or thirtieth (that is, for the deciduous teeth). There is no writer on the diseases of children that does not assert facts, more or less positive, to the effect that teething is the cause of summer complaint. I have invariably found it accompanied by vomiting and loose bowels; and in the majority of cases, I have observed these symptoms at the irruption of each tooth. It is not only the irritating influence of dentition that induces a peristaltic action of the bowels; we must not lose sight of the fact, that the digestive canal is simultaneously undergoing a certain evolution, in order to prepare it to receive food suitable for the maintenance of the body at this stage of its development. At the same time, the salivary glands commence to secrete saliva in abundance; and the whole glandular system assumes a rapid growth, and with it receives a new excitability, aggravating the exquisite sensitiveness of the growing parts, producing vomiting and diarrhœa. Admitting, however, that the disturbances arising at the time of dentition are but temporary, and chiefly of a nervous character, and finding the common every-day treatment fail of giving prompt relief, why do we not use a sedative to this over-excited system? In the most severe cases of odontitis, either with or without ulcerated gums or loose bowels, I have never failed to relieve the child by the local application of the bromide of potassium. Almost immediately after the first rubbing on the gums, from being turgid, swollen, and red, they assume their natural color, and a certain amount of ease is felt. Saliva commences to dribble; and, as if by enchantment, agitation, carpopedal involuntary motion, vomiting, and looseness of the bowels disappear. As the vomiting and diarrhœa in this case are not the consequence of gastro-enteritis, but of an excitement of the stomach and the intestinal mucous membrane, owing to the inflamed condition of the gums, I suppose it will never be cured either by the scarification of the gums, or by the use of astringents or anodynes; but, as I shall hereafter prove, simply by the use of the bromide of potassium. By microscopical examination I have

found in the vomited matter only undigested food, in different stages of disintegration, and small particles of the mucous membrane of the stomach. The fæces in the beginning of the affection are like broken-down and half-digested particles of food. When the stools have turned green, they contain decomposed blood and bile; when white, large quantities of mucous membrane, and even matter; and, when red, blood. I have had no opportunity of making any anatomical sections, therefore can say nothing regarding the pathological condition of the internal organs; but I would submit it to our anatomists and microscopists to look into the trisplanchnic nerves, as well as the brain and spinal marrow, and see if there can be found anything worth studying.

Symptoms.—As a general rule, this affection sets in suddenly, announcing itself in the physiognomy of the child, changing the expression from pleasing to desponding. He grows fretful, is disturbed with pains in the body. Soon the eyes become sunken, looking dim and dead, with bluish circles around the lower lids. If not motionless, he expresses his sufferings by moans, piercing or pitiful cries. The body is cramped, the skin cold, clammy or dry, shrunken and bluish if touched, leaving the impress of the fingers. The pulse quick and weak; the tongue moist, cold, and covered with a thin mucus through which appear the bright red papillæ.

In the beginning of the attack the child is occasionally seized with vomiting; soon this becomes incessant, the little patient ejecting whatever food or drink is offered him. His thirst is intense. The materials at first vomited are the food or drink which may have been given. This soon changes into a yellow or greenish substance like coffee diluted with milk, or dirty water. The vomiting is succeeded by the flux of the bowels. At first, the discharges are of a natural appearance, but soon change to yellow, like the yolk of an egg, mixed with slime and froth, which, when exposed to the air, will turn green. A little later, they become green as grass, mixed with white and yellow mucus, streaked with blood; dirty, like the water of washed meat; or else altogether bloody. These passages are often preceded by griping pains; they are sometimes passed unnoticed. Tenesmus and prolapsus ani are in some cases the source of great distress to patients, and annoyance to parents.

Sometimes the vomiting and evacuations simultaneously, or separately disappear, and the senses are lost, and, from being restless and agitated, the child becomes calm. This is succeeded by convulsive twitchings of the legs and arms, contortions

of the eyes, clenching of the fists, with the thumbs closed within, as forerunner of a false hydrocephalus.

The thermometer, at this juncture, when applied to the skin, even in the hollow of the axilla, descends, proving the diminution of heat on the external surface of the body. The face assumes a leaden hue, and the nails are blue. In this state, all the efforts of a skilful physician may prove unavailing and the child die from exhaustion. But it sometimes happens that the child, being vigorous, survives this attack, and passes for a few hours into a comatose state, having neither vomiting nor passages from the bowels. Whilst in this condition reaction takes place, and upon awakening he has a few irregular passages, vomiting but seldom or not at all. The food, although taken with dislike, is retained.

In a few days he commences to nourish as usual, and he recovers. The food I generally recommend to weaned children is chopped raw meat.

Treatment.—Various have been the remedies for the treatment of this malady. I will enumerate a few:—Castor oil, sulphate of magnesia, rhubarb, ipecac, sulphuric acid, ether, chloroform, sweet spirits of nitre, liquor potassæ, carbonate of soda, lime water, Dover's powders, belladonna, hyoscyamus, hydrocyanic acid, opium, lactucarium, tridace, extract of poppy, mercurials, logwood, kino, catechu, tannin, chalk, krameria, bismuth, nitrate of silver, gallic acid, lead, iron, zinc, bark, &c. Also leeches, flax seed, bran and herb poultices, mustard poultices, and baths, tepid and cold water baths, &c.

For years the above remedies, either alone or combined, have been used in various ways according to the tact and skill of the practitioner, and his success has been baffled by countless difficulties. Even in these days of enlightenment, when medicine is making such rapid progress, and we find in almost every medical periodical some new remedy for this or that malady—strange to relate, in the bowel complaints of children, excepting a slight difference in the combination of drugs, our treatment continues the same as was followed centuries ago. Let us deviate for a while from the routine of castor oil, ipecac, and calomel, and take in hand the so much talked of drug, the bromide of potassium, and see what success we shall have. At the very sound of its name many of my confreres will deny its efficacy. But, gentlemen, if you will kindly listen to me, I shall submit to your judgment one hundred and sixty-three recorded cases of my gathering; and hope you will arrive with me at the conclusion that the bromide of potassium is an invaluable remedy, nay, a specific in summer complaints.

Cases.—I. Casperina Watterau, one year old, born of healthy German parents; nursed by her mother under a very favorable hygienic condition; has six teeth and is healthy. July 15th, 1868, weather very damp and warm; she was suddenly seized with vomiting and free discharges from the bowels. On arriving at the house I found her very much reduced. Eyes sunken, skin and extremities cold, abdomen flat and shrunken, tongue pale, cold, and covered with mucus, pulse hardly perceptible, and impossible to count. I had the child wrapped in warm flannels, gave calomel and opium, brandy and starch injections. On the 16th no improvement. Continued the starch injections, and prescribed chalk mixture and tincture of kino. On 17th, grows worse. Convulsions set in with total loss of senses. I omitted the above remedies, and prescribed twenty minims of tincture of digitalis with one scruple of bromide of potassium in an ounce of water, giving 10 drops every hour. The improvement was immediate. She had no relapse of the above symptoms, became convalescent, and on the 27th was discharged. I was again called to see her on the 2d of August, and found a phlegmonous abscess on the back of the left leg. Poultices were applied, and on the morning of the 4th, I lanced it, and about four ounces of healthy pus came out. In the evening I saw the little patient, and found her very uneasy. The abscess had dried as if it had never suppurated. In the middle of the night convulsions set in as if produced by pyæmia. The bromide of potassium was resumed to check the convulsions, but had no effect, and during the night of the 5th she died.

II. Joseph Frost, six months old; Born of healthy Irish parents; has two teeth; is fed from the bottle; lives in a healthy neighborhood and in well ventilated appartments. July 29th, he is seized with cramps, vomiting, and almost incessant purging. I prescribed a mixture of a half-drachm of bromide of potassium in two ounces of mucilage, giving thirty drops every two hours. After the third dose all alarming symptoms disappeared, and the child recovered. On the 14th of August, he had a relapse, and his mother, having saved what remained of his medicine, gave it to him, and he was again cured.

III. John Sinott, twenty-eight months old. I took charge of him on the 1st of August. For several days he had been suffering from vomiting and purulent discharges from the bowels. I prescribed aromatic syrup of rhubarb with laudanum, but without effect. On the 2d, I gave twenty drops every hour, of a mixture of ten grains of bromide of potassium, in an ounce of mucilage, with twenty minims of tincture of krameria. After

a few doses the child slept, and upon awakening asked for bread and butter. Vomiting ceased. The flux of the bowels changed from purulent to yellow; and the twenty-four to thirty passages every twenty-four hours, diminished to six. He became convalescent, and on the 8th was discharged.

IV. J. A. Crigier, twenty months old; has twelve teeth. According to his mother's statement he has never given trouble, eating and drinking whatever was offered him. On the 3d of August he fell from a chair, striking his buttock, apparently receiving no injury. During the night his bowels became loose, accompanied by vomiting of a dirty-water-like substance. In the morning he had convulsions. During the afternoon I found him very comatose; pulse from ninety-five to one hundred; pupils dilated; hemiplega of the right side; alvine discharges, from twelve to fourteen, every twenty-four hours, of a thin fœtid matter. About every six hours convulsions of ten minutes' duration, accompanied by vomiting. I prescribed revulsives to the lower extremities and arms; and every two hours, twenty drops of a mixture of one drachm of bromide of potassium, in an ounce of mucilage. The motion of the bowels and vomiting ceased.

After a few days, as the comatose and hemiplegic condition continued, iodide of potassium brought matters right. On the 1st of Nov., he had another fall, merely affecting his bowels by free motion; the bromide of potassium immediately stopped it.

V. John Balheimer, thirteen months old; has six teeth; is fed by the bottle. On the 15th of August, I saw the child for the first time. He had been suffering for fourteen days from inflammatory dysentery, having passages of a purulent and bloody nature, from twenty to twenty-four, every twenty-four hours. His thirst was intense; he vomited every fluid offered him. The eyes were sunken, pupils dilated, skin corrugated and spotted blue, body cold, tongue red and dry, pulse imperceptible; no urine. In addition to this he had bronchitis with severe cough. I prescribed one scruple of bromide of potassium, in an ounce of mucilage, with half a drachm of tincture of krameria, twenty drops every two hours. The passages decreased. On the sixteenth day of his sickness, and the second under my care, he was able to eat and sleep. His passages were only four in twenty-four hours, and of a healthy appearance. In order to allay the bronchial cough, I prescribed ten drops of fluid extract of poppy, to be taken every two hours. On the 1st of September he was discharged. A few days later he had a relapse, and on account of distance was placed under the care of a homœopathist, and died.

On the 15th an elder brother was brought to me, suffering in a similar manner from dysentery. The disease was immediately checked by the bromide of potassium.

VI. F. Skerret, two years old; has sixteen teeth. He was suddenly seized with purging and vomiting.

6th of August he was brought to me, twenty-four hours after his attack. I found him restless, emaciated, pulse weak, over one hundred and fifty, skin cold, abdomen shrunken, tongue pale and cold; stomach ejecting all fluids, almost in their natural state; from the bowels dirty-water like, odorless passages. Ten grains of bromide of potassium in an ounce of mucilage, ten drops every hour, abate all symptoms, and the next morning he is able to eat and drink as usual, and reported well.

I have had one hundred similar cases, varying in age from three to thirty months, nursing or weaned. I have treated them with the bromide of potassium, and mucilage, and have never found it to fail.

VII. S. Fay, nine months old; has six teeth; nursed by a healthy mother. After fifteen days of diarrhœa, with from fifteen to twenty passages every twenty-four hours, is cured by a mixture of one drachm of the bromide of potassium, in an ounce of mucilage, twenty drops every hour.

I have had fifteen similar cases in every form, having been sick from fifteen to twenty days before coming to me, all treated and cured by the bromide of potassium.

VIII. D. Burk, two months old; nursed by a healthy mother. The child was taken sick with convulsions, vomiting, and diarrhœa. Weather warm and damp. On the 31st of August, a few days after his attack, I found him with his eyes moving in every direction, but without taking any notice; pupils dilated; feet and hands bluish and cold. The pulse could not be found. He was vomiting every ten or fifteen minutes; stools irregular, but very frequent, varying in color, white, green, and yellow.

Twenty drops of a mixture of one ounce of mucilage with ten grains of bromide of potassium, taken every hour, cured this baby, and five others similarly attacked.

IX. J. Murray, five years old. This child, when born, although very healthy, only weighed three pounds and a-quarter. His mother died three months after confinement of hypertrophy of the heart. His father is a sober, healthy Irishman. The child was fed from the bottle. He struggled along through many diseases, having had hydrocephalus, measels, scarlet fever, diphtheria, nephritis, bronchitis, and, once a year, a severe attack of dysentery, commencing with the warm weather, and last-

ing until fall, which I found very difficult to cure. On the 26th of August he was seized with a profuse flux of the bowels, accompanied by vomiting; and when brought to me he was almost a corpse. I thought this an excellent case to try the efficacy of the bromide of potassium. I gave half a drachm, in an ounce of water, thirty drops every two hours. His father came to my office the following morning without the child. His first salutation was, "My child is better; why did you not give the same medicine last year?" The child continued to improve, and in a few days was perfectly well.

X. J. McEvoy, twelve and a-half years old: a healthy boy attending school. August 13th, having eaten a bellyful of green apples, he was seized with cramps in the belly and legs, colic pains, vomiting, and loose bowels. For forty-eight hours his parents doctored him with castor-oil, paregoric, cholera drops, mustard baths, &c., &c., but without giving relief. I was sent for on the 15th, the third day of his sickness. I found him with eyes sunken, skin cold and corrugated, extremities bluish, which upon being touched would leave the white impress of the fingers for more than twenty-five seconds. The abdomen was almost stuck to the vertebral column; breath hurried and hot; tongue pale; voice scarcely audible. The boy was shivering with cold, although covered with mustard plasters, blankets, etc., and in an exceedingly hot, low-ceilinged room on the top floor. His thirst was intense. The drinks given him were, rice-water, beef-tea, brandy and water, ice-water, milk-whey, &c. No sooner taken than ejected indiscriminately, both up and down, almost in their natural state. I thought this case almost hopeless, but trusting to the efficacy of the bromide of potassium, I prescribed a-half drachm in an ounce of water, a teaspoonful every two hours; also a flax-seed meal poultice over the abdomen. The second dose caused great reaction, stopping the vomiting and flux of the bowels, and the boy fell asleep. The next morning I found him in his hot, unhealthy room, laughing and well.

I have had twenty-five similar cases, ranging from twelve to forty-six years of age.

XI. D. Burk, twenty-four years old; sculptor. On the 15th of August, while digging a hole in his courtyard, near the privy, in the heat of the sun, he was seized with vomiting, discharges from the bowels, and cramps. At first the passages were brown and fetid, and the vomit of a yellowish and greenish color. When I saw him the following day the conjunctiva of both eyes was injected; pulse full, over 125 per minute; skin hot and dry; tongue moist, but breath very warm. The vomiting had almost

ceased; cramps were continuing in the legs; the passages had changed from brown to the color of meat-washings, copious and very painful. I ordered him to be sponged with cold water and bay rum; his limbs rubbed with a liniment of olive oil and chloroform; and gave internally one drachm of bromide of potassium in two ounces of mucilage, with twenty minims of the tincture of krameria, thirty drops every hour. After the third dose his skin became cool, a genial perspiration diffused itself, and he fell asleep. From 3 P.M. to 11 A.M., he had but three scanty passages, yellowish and without pain. The third day he was well.

I had two more similar cases; one, a plumber, becoming sick after opening a waste-pipe; the other, a carpet weaver, living in Newark, N. J., in a damp low region. When this last-mentioned man came to me, he had been sick for twenty-one days, with clear bloody passages, three every two hours. I prescribed the bromide of potassium as above, and in three days he was able to work.

XII. Mrs. Debaun, twenty-five years old; of nervous temperament; the mother of several children; lives in one of the shanties in 36th street, between 10th and 11th avenues. She is very fretful, crying at trifles. She keeps constantly brooding over the loss of a daughter, and is almost crazy. From fretting, loss of rest, and want of nourishment, she is seized with nervous dysentery of several days' duration. One drachm of the bromide of potassium in an ounce of water, a teaspoonful every two hours, cures her.

XIII. J. McDonald, four years old. For several days he had bloody dysentery and tenesmus with prolapsus ani. After a few doses of the bromide of potassium, the dysentery ceased. Unfortunately, from neglecting to return the rectum, it became strangulated and mortified; and consequently the child died.

XIV. J. Higgins, a healthy infant, deprived of the breast from his mother's dying seven days after confinement. When only three days old he began to suffer from retention of meconium. All nourishment was ejected with great force, even the breast milk of a woman confined five days before his birth. The stomach, from the irritating action of the meconium, could not retain either medicine or food, nor could the bowels be moved. Ten grains of bromide of potassium in an ounce of orange-flower water, ten drops every hour, put a stop to all disagreeable symptoms; the baby slept, its bowels moved, and after the discharge of the meconium, it commenced to nourish from the bottle without any further disagreeable results.

I had three similar cases, not owing to the mother's death but the infants being deprived of the maternal nourishment from other causes.

XV. Mr. A. B——, seventy-five years old; of nervous temperament; healthy, but weak from advanced age. In the beginning of September he went to Tarry-town to spend a few days with friends. After taking a ride in an open wagon, along the banks of the Hudson, the atmosphere being raw and damp, he found himself, upon returning home, stiff and unable to walk. He was brought to New York, and on the 7th of September I was called to see him. I found hemiplegia of the left side, and commenced to treat him with the usual remedies for this affection. Everything progressed favorably until the 16th, when the life of my patient was threatened by a profuse painless diarrhœa. I used various remedies to stop this, but without success. On the 20th, the fourth day of the attack, a teaspoonful of a mixture of two ounces of mucilage of quince seed and one drachm of bromide of potassium, taken every two hours, saved his life.

XVI. Joseph O'Brien, twenty-one months old; has sixteen teeth. He was taken sick in the beginning of September, with diarrhœa and vomiting, and continued in this state until the 1st of October, when I was sent for. I found the child emaciated; pulse very high and feeble; incessant vomiting, and frequent putrid passages from the bowels. Abdomen very tender, apparently from great sensitiveness of the mesenteric glands. As an experiment, I used the bromide of potassium, and succeeded in arresting the vomiting and flux of the bowels. But on the 8th the patient died of mesenteritis.

XVII. After a good many days of extreme fatigue, loss of rest, want of proper diet, and abuse of iced water, whilst in a state of perspiration, I was myself seized, August 24th, with painless diarrhœa, lasting for two days, having from fifteen to twenty passages in twenty-four hours. Although the weather was excessively warm, I was obliged to clothe myself with heavy winter flannels. My abdomen, particularly, was very cold. Internally my breast was burning; externally, chilly. Pulse one hundred, but weak; tongue cold; throat hot and constricted. My head was as if in a furnace, although otherwise without pain. Urine scant, dribbing a few drops when I went to stool. At every evacuation I felt as if my intestines were sinking from me. I was restless and shaky, as if seized with palsy. During the evening of the 26th, I took, every hour, five-grain doses of bromide of potassium in pure water. No sooner was it taken,

than a pleasing sensation of heat diffused itself through the abdomen, and my head became cool. The creeping chills were replaced by a gentle heat. After the second dose I fell asleep for six hours, perspiring profusely; and in the morning called for my usual cup of coffee and ice, and resumed my practice.

XVIII. During the riot in this city, a boy about twelve years old was struck between his shoulders with a club, by one of the rioters. He fell insensible, and was carried home. A few minutes after his arrival he commenced to vomit the contents of the stomach; afterwards a dirty and yellow watery substance. For two days nothing could stop the vomiting. On the third day I gave him the bromide of potassium, not with the intention of stopping the vomiting, but to make him sleep. No sooner was the first dose administered than the vomiting ceased, and he slept.

XIX. J. McG——, thirty-four years old; porter in a store in Chambers street. Some time in April, 1866, after pumping water, and whilst in a state of perspiration, he assisted the plumber to open a waste-pipe, from which arose a stench so terrible as to cause all hands to vacate the premises. He remained to finish his work, but was soon obliged to stop, being suddenly seized with vomiting. He was conveyed to his home in 28th street, between 6th and 7th avenues. He sent for his family physician, and after five weeks of unsuccessful medication was given up. The poor man, in an exhausted state, sent for me. I found him very weak; pulse ranging from one hundred and twenty to one hundred and thirty, small and compressible; vomiting every particle of food taken, whether solid or liquid. I used various remedies, but after five weeks of medication I was as unsuccessful as my predecessor. Fearing for the life of my patient, I called in consultation Professor A. Clarke. After a careful examination of the case he arrived at the same conclusion which I had reached, namely, that the man was affected with miasmatic nervous fever producing vomiting, and that a fair trial of the sulphite of soda, which I had already given, would probably insure success. I continued the medicine for forty-eight hours, but was disappointed. Every conceivable remedy was used without the desired results. The patient growing weaker and restless, I prescribed bromide of potassium to cause sleep. He slept, and, to my astonishment, the vomiting ceased. As he was taking nitrate of silver, bismuth, opium, and belladonna, I attributed the relief to these drugs, and not to the bromide of potassium, and so let it pass unnoticed.

XX. During the summer of the same year, a child of about

eighteen months was taken sick with diarrhœa and vomiting. One remedy after another was used without giving relief. The child being restless both night and day, and troubled with strabismus, I gave him bromide of potassium to make him sleep. His bowels ceased moving, and his eyes returned to their normal state.

Notwithstanding these successes, my attention was not directed to the remedy until the first case spoken of in this paper, when I used the bromide of potassium, not as a remedy for the disease, but to relieve the child from convulsions. When I saw it arresting vomiting and the flux of the bowels, I concluded it must be a good remedy for summer complaint.

Now let us speak on the merits of the drug. Taking for granted, that in matters of fact, in medicine particularly, we can judge better *a posteriori* than *a priori*, I submit my cases and conclusions to this enlightened body. Not accepting the doctrine of some of the modern writers, that the intestinal flux is a symptom of some inflammatory affection; but adopting the opinion of the celebrated Capuron, that infancy being naturally the age of nervous sensitiveness, susceptible to internal and external impressions, easily irritated or calmed, and judging from several other cases besides those just read, I think that in its beginning, summer complaint arises from an overexcitement of the nervous and vascular systems, and that therefore the bromide of potassium affects it, and acts as a sure cure.

I cannot better explain the action of the bromide of potassium on the system, than by quoting the words of Headland, found on page 272 of his work, "*On the Action of Medicines:*" "The bromide of potasium, a medicine of the mineral kingdom, has been much recommended lately for its power of producing sleep; it is, however, not a true soporific, but rather a general sedative. As far as my experience goes, it acts by allaying irritability of the brain, spinal cord, and sexual system, and thus may indirectly cause sleep." And on page 283,—"The bromide of potassium, a remedy of recent introduction, is exceptional among nerve medicines, as belonging to the mineral instead of the vegetable kingdom. It quiets the nervous system generally, allays pain, promotes sleep, and subdues a morbid irritability of cutaneous or mucous surfaces, by its influence over functional disorders of the nervous centres. It is only indirectly soporific, as far at least as I have been able to judge." Mr. Gubler considers the bromide of potassium a general sedative to the nervous system, allaying irritability of the mucous membranes, and at the fauces and genital passages especially.

He thinks it hypnotic, causing sleep by its sedative action on the whole nervous system. M. Vigouroux thinks it acts by diminishing vascularity of the great nervous centre. It is therefore the remedy, par excellence, for the nervous complaints that are common in large cities.—(*L'Union Medicale, 1864.*)

I have never discovered any unpleasant effects produced by the use of the bromide of potassium, and have always found it to answer my purposes. If locally applied, it reduces the excessive heat found in the mouth of the baby, caused by the inflamed condition of the gums. On introducing the thermometer into the mouth and anus of the baby, I have seen it fall four or five degrees. The drug is an anæsthetic to the nerves of the mucous membrane of the alimentary canal from the mouth to the rectum, of the urethra, the conjunctiva and the nares. It is also a diuretic. In cases where the urine has not been voided for twenty-four hours, after the first dose of the bromide it is freely passed; the skin commences to feel warm and becomes covered with a gentle perspiration, removing uræmic spmptoms, causing general reaction, and invariably the decrease of the intestinal flux, and an absolute cessation of vomiting.

The medicine being almost tasteless, and of no bulk, it is easily taken by the most fastidious and troublesome child. I generally prescribe from ten to thirty grains in an ounce of vehicle, either mucilage or orange-flower water for their pleasant taste; the dose being ten to thirty drops every hour or two, varying according to the age of the patient, and the acuteness of the case. I seldom use astringents with it; but if required I select the tincture of krameria, as less disgusting than kino and others. For local application I mix the salt with mel rosarum, generally using one scruple of the first to an ounce of the latter, permitting the mother to rub it on the guns with her finger *ad libitum.* When used in large doses, I have not found very satisfactory results from the bromide of potassium; but I always succeeded with minute doses.

You will observe that of the cases I have just reported, only three died, and the fatal result in these was due not to the bowel complaint, but to other causes. I had also four cases which I purposely and obstinately treated according to the generally adopted system. To my regret I must confess, that but one, after a long and severe struggle, recovered; the other three died.—*New York Medical Record.*

BELLADONNA IN WHOOPING-COUGH.

By DR. B. S. WOODWORTH, Fort Wayne.

I heard Brown-Sêquard say, in a speech or lecture before the American Medical Association, at Baltimore, a few years ago, that whooping-cough could be cured in three days by belladonna. But that in order to do this it would be necessary that the physician should stay in the house of the patient and watch the effects of the medicine. I took notes of this lecture at the time, and on the first opportunity I prescribed belladonna in doses that I had not previously dared to do. I became convinced, however, that this drug was signally efficacious in whooping-cough, and I have never failed since that time to give the medicine, not only in whooping-cough, but in many cases of cough among adults that seemed to depend principally upon nervous derangements. A recent epidemic of whooping-cough in this city has given me an opportunity to witness the effects of belladonna in a larger number of cases than I have previously witnessed it; and I have no more doubt of the specific influence of it than I have of that of quinine in intermittent, or of ergot in producing contractions of the uterine muscles. By the way, although some have denied that the specific effects of the latter are certainly to be relied upon, I must truly say that I *never*, after a practice of thirty years, knew it to fail.

In the present epidemic I have treated about fifty cases—all but one were uncomplicated with other diseases. The exceptional case, a child four years old, had capillary bronchitis, and possibly very circumscribed pneumonia, and for several days death seemed imminent, but recovery took place. Most of the cases had had the usual symptoms of bronchitis for several days before I prescribed for them—in short, the disease was fully developed. I began by prescribing the extract in as large doses as I thought the patient would bear, and increasing it at every successive dose until the pupils were fully dilated, and then kept them dilated, being careful to tell the friends to watch the effect and omit the medicine in case any dangerous symptom supervened. I have never seen any ill effects from it. In a majority of the cases that characteristic scarlet flush or effloresence appeared, and with it an abatement of the cough, or of its spasmodic character. In a few cases I gave opium with the belladonna, or alternately. In that case the dilation of the pupils will not be witnessed, if they be given in about the medium dose of each—they balancing (not neutralizing) each other. I believe

it is now generally conceded that those narcotics, which we call mydriatics, are antidotes (or *nearly* so) to those that produce contraction of the pupil, and *vice versa*. But, perhaps, more experiments, or more experience, are wanting to verifiy this. I, however, think it probable that we may find it advantageous to prescribe the two together sometimes, thus avoiding the bad effects of either, while the good are obtained. This is no new principle in medicine, I am aware, and for a long time I have acted on that principle in reference to quinine and opium—considering one an anti-congestive, while the other is congestive in its effect.

Now, although I have not proved Brown-Sêquard's saying, that whooping-cough can be cured in three days, I verily believe it can be cut short; and there is no more need of whooping-cough continuing for months than there is for ague continuing an indefinite length of time when plenty of quinine can be found. — *Western Journal of Medicine.*

Proceedings of Societies.

MINNESOTA STATE MEDICAL SOCIETY, SEMI-ANNUAL MEETING AT OWATONNA.

The State Medical Association convened at Owatonna, at 12 M., on the 16th inst., with Dr. J. H. Murphy temporarily in the Chair.

Minutes of last meeting read and approved. A committee of three on Credentials was appointed, when the convention adjourned until 2 P.M.

AFTERNOON SESSION.

Reassembled at the appointed time. Dr. Samuel Willey, President of the Society, arrived and took the Chair.

The Committee on Credentials reported the names of 17 physicians as duly qualified for membership, which report was accepted.

Dr. H. H. Kimball, the essayist appointed at the previous annual meeting, being absent, his valuable paper on "Rheumatism" was read by Dr. W. F. Hutchinson. An annimated dis-

cussion followed its reading, participated in by a number of gentlemen, upon points presented by the essay.

EVENING SESSION.

"Quackery," the subject for discussion was, on motion, changed to "Typhoid Fever." After the close of the debate, a resolution was introduced empowering the Chair to appoint a committee of three to report on Typhoid Fever, its origin, cause, and treatment, at the next annual meeting. The following gentlemen were appointed as such Committee:—Drs. Milligan, Richardson, and Mayo.

The President, Dr. Willey, offers for competition to members of the Society the two following prizes:—$50 for the best essay on Epidemic and Endemic Diseases of Minnesota, and $50 for the best essay on Cerebro-Spinal Meningitis. The respective merits of the essays to be determined by a committee appointed by the President.

A vote of thanks was unanimously adopted to the citizens of Owatonna, and especially Dr. Blood, for the generous hospitality extended by them to the members of the Society.

The Society then adjourned to the next general meeting at St. Paul, February 2d, 1870.

E. J. DAVIS, *Secretary.*

CARROLL COUNTY MEDICAL SOCIETY.

The Society met persuant to call of the Secretary at the Supervisor's rooms, in Mt. Carroll, at 11 o'clock A.M., June 9, 1869. After making some arrangements for the good of the Society, and exchanging views on medical topics, the Society adjourned until 2 o'clock P.M.

Afternoon Session.—Meeting called to order by the President; minutes of previous meeting read and approved. Dr. Thomas Winston, of Mt. Carroll, Ill., and Dr. Nelson Rhinedollar, of Mt. Carroll, were then elected and admitted to full membership in the Society.

On motion, it was ordered that the chair appoint a committee

of three to draft a fee-bill, and report at the next regular meeting. The following named members were appointed to read papers at our next meeting:—

On Gun-shot Wounds—Dr. T. Winston, Foreston; on Contagious Diseases—Dr. D. M. Greely, Mt. Carroll; on Materia Medica—Dr. N. Rhinedollar, Mt. Carroll; on Medical Botany —Dr. Shimer, Mt. Carroll; on Diseases of the Liver—Dr. J. Haller, Lanark; on Diseases of the Heart—Dr. J. B. Porter, Lanark. Some, who were to read at this meeting, were not prepared. We shall be pleased to hear from them at our next.

On motion, it was ordered that any member or others, having papers prepared, and can not attend in person to read them, will please send them to the Secretary a few days before the time of meeting. Dr. Shimer then announced that Prof. Robley Dunlingson, M.D., of Jefferson Medical College, Philadelphia, died April 1, 1869. On motion of Dr. J. B. Porter, Dr. Shimer was appointed to present a biographical sketch and eulogy on the name of our highly esteemed and deeply lamented brother and instructor, to be read at our next meeting. Dr. Greeley, Mt. Carrol, read an essay on "Veratrum Viride," which although brief was well written. The Doctor set forth some very able arguments in regard to this agent. There was quite an interesting discussion of this subject by Drs. Shimer, J. B. Porter, Winston, and Hostetter. Some of the members then gave reports of some cases in their practice, and asked for the views of others. This was very interesting, and if continued as a part of the exercises of our meetings, will, no doubt, be of very great benefit to the members and their patrons. On motion of Dr. Greeley, it was decided to hold the next regular meeting of this society, in Lanark, in the first part of September next; the day of meeting to be decided by the Secretary.

On motion, it was ordered that the proceedings of this meeting be published in the county papers, and the Medical Journals of Chicago.

On motion, the society adjourned.

JNO. L. HOSTETTER, M.D., *Pres.*

J. HALLER, M.D., *Sec'y.*

Book Notices.

A Manual of Elementary Chemistry, Theoretical and Practical. By George Fownes, F.R.S., late Professor of Practical Chemistry in the University College, London. From the tenth revised and corrected English edition. Edited by Robert Bridges, M.D., Professor of Chemistry in the Philadelphia College of Pharmacy. With 197 Illustrations. Philadelphia: Henry C. Lea. 1869.

This a new and carefully revised edition of a well-known text-book of practical chemistry. A number of important additions have been made, and it will continue, as heretofore, to hold the first rank as a text-book for students of medicine.

Monograph on Hemorrhagic Malarial Fever. Read to the Alabama State Medical Society, and republished from the New Orleans Journal of Medicine. By R. Frazer Michel, M.D., of Montgomery, Alabama. 1869.

This is a very interesting monograph of only 19 pages, giving an account of the history, symptoms, pathology, and treatment of a very peculiar and fatal form of malarial fever, as it has prevailed in Alabama, Louisiana, and Texas during the last few years.

Carbolic Acid: Its Surgical and Therapeutical Uses. A paper read before the Cincinnati Academy of Medicine, June, 1869. By Wm. B. Davis, M.D., of Cincinnati.

This is a paper of 13 printed pages, in which the author gives a very judicious summary of what is known of the actual surgical and therapeutical value of carbolic acid.

Treatment of Lachrymal Affections. By Prof. Arlt, Professor of Ophthalmology, at the University of Vienna. Translated by John F. Wightman, M.D. Philadelphia: Lindsay & Blakiston. 1869.

This is a monograph of 30 pages, in paper cover, but on ex-

cellent type and paper. It contains, in a brief compass and cheap form, the present state of our knowledge concerning a very troublesome class of affections.

Editorial.

New Mercy Hospital.—The corner stone of the new Mercy Hospital building was laid, with due ceremony, on the 25th of July. A very large number of citizens were present, and interested in the exercises. The public address, together with a description of the building, will be given in the September number of the Examiner.

College Lecture Fees.—We see it stated in some of the medical journals that the American Medical Association, at its recent annual meeting, adopted resolutions declaring the minimum fee for a regular college lecture term should be $120, and that such colleges as refused to comply with that rate should be denied representation in said Association. The statement, however, is an error. The Association did adopt a simple declaration of opinion, that the *minimum fee* for a regular college lecture term should be $120. It did *not* adopt any resolution in relation to denying representation to such colleges as did not accept the standard proposed. And, so far as we have learned, the colleges generally are issuing their circulars with the same rate of fees for the coming session as had been required during the past year. The action of the Association was in the form of a simple expression of opinion, and nothing more.

Medical Controversies.—Perhaps there is no one thing better calculated to impair the honor and usefulness of the medical profession, than the bitter personal controversies, or, more properly speaking, *quarrels*, that every now and then spring up among its members, and find ventilation either through the medical or secular press.

Some men appear to be so constituted that they cannot correct the errors, refute the arguments, or point out the misrepresentations of others, without directly attacking their personal characters. Such men are continually acting as though the most violent denunciation constituted the most conclusive argument, and the blackening of the character the most complete correction of all misrepresentations. They are practically incapable of discussing any subject, either on the platform or through the press, without involving themselves in *personalties* altogether foreign to the subject itself.

These thoughts have been suggested chiefly by an article in a recent number of the *Nashville Medical and Surgical Journal*, by T. S. Bell, M.D., of Louisville, concerning E. S. Gaillard, M.D., of the same city. From this article it would appear that Dr. Bell had at some previous time delivered and published a lecture on a subject relating to antiquarian researches. Dr. Gaillard, in his capacity of editor of the *Richmond and Louisville Medical Journal*, reviews this lecture, pointing out what he supposed to be defects in its style and logic.

Ostensibly for this Dr. Bell writes a dozen pages of the most violent personal abuse of Dr. Gaillard; and what is perhaps even less excusable, the editor of the *Nashville Medical Journal* permits the article to appear in his columns. We say less excusable, because the editor, as a third party, is supposed to be free from the personal feeling that actuates the writer, and consequently capable of seeing the injurious bearing of such papers, both on the writer and on the profession at large. If he had returned the manuscript to Dr. Bell, with the friendly advice to burn it up, or reduce it to a simple dignified correction of whatever errors or misstatements he supposed to have been made in the *Richmond and Louisville Journal*, how much of censure and scandal would have been saved to all parties.

Viewed in the light simply of a reply to the review of his lecture in the *Richmond and Louisville Medical Journal*, the article of Dr. Bell, in the *Nashville Journal*, is in the highest degree censurable. If the editor of a medical journal cannot exercise the right of noticing the publications of the day, and in

such notices pointing out their defects or errors, or both, without calling out in return such a torrent of personal detraction as we find in the article of Dr. Bell, then is the position of a medical editor a very undesirable one indeed. But the truth seems to be, that the review in the *Richmond and Louisville Journal* only served Dr. Bell for a pretext, the real cause of his article being a bitter feud which had existed many months between Drs. Bell, Gaillard, and others connected with the two medical colleges in Louisville; a feud which had found vent in the newspapers of that city, and which the profession generally will regard as reflecting no credit upon any of the parties concerned.

We can excuse men for getting into a passion when assailed unexpectedly in conversation, but to dip a pen into gall and sit deliberately down to expose the predominence of our passions over our judgment, is to show the weak side of poor human nature unnecessarily.

"Sweet Quinine."—The preparation largely advertised under this name has been analyzed by the editor of the *American Journal of Pharmacy*, who states that it is not quinine at all, "but mainly the alkaloid *cinchonia* precipitated from the sulphate, dried and triturated with an impure glycyrrhizin prepared from liquorice root," in the proportion of about three parts of cinchonia to one of inpure glycyrrhizin. The *Journal* adds: "Cinchonia, however tasteless, is not quinine, nor does its commercial value approach that of quinine so nearly as it is made to do in the garb of 'sweet quinine.' When physicians want cinchonia they can get it by prescription, and it is not in accordance with our ideas of fair dealing to serve it up as a new substance."—*N. Y. Med. Gazette.*

Cholera and Yellow Fever in Cuba.—Sickness is increasing in the ranks of the Spanish and rebel forces, and the mortality is frightful. It is estimated that the deaths amount to 15 per cent. monthly, of the men in the field on both sides. The Spanish troops are afflicted with vomito, while the insurgents suffer from cholera and diarrhœa, caused especially by want and exposure. When the hot and rainy seasons are past the volunteers will go into active service in the field and reinforcements will arrive from Spain.—*Havana, July 17th.*

The Messrs. Johnson, of Philadelphia, announce an important work on "*The Jurisprudence of Medicine in its relations to the Law of Contracts, Torts, and Evidence,*" by Professor John Ordronaux. Such a work has long been needed, and the author's reputation gives assurance that the hiatus will be thoroughly filled.—*N. Y. Med. Gazette.*

Impurity of Water.—In every 100,000 tons of the water supplied to London, the solid impurity averages from twenty-eight to forty-two tons; in Edinburgh, from eleven to fourteen tons; Bristol, twenty-eight tons; Manchester, six tons; Dublin, six tons; and Glasgow, only three tons.—*Ibid.*

The Contagion of Consumption.—M. Chauveau, Professor in the Lyons Veterinary School, continues perseveringly his researches on the contagiousness of Tuberculosis. He has of late selected the intestinal surface as the field for his investigations, and through it by introducing tuberculous matter into the circulatory current he has produced at will general tubercle. The *Union Medicale* reports that he lately purchased four handsome heifers, and he tuberculized three of them by causing them to swallow 30 grammes each of tuberculous matter taken from the body of an old phthisical cow. The rapidity of the result was extraordinary. At the end of twenty days the first heifer had lost flesh to a surprising extent, its pulse was quick and full, and coughed incessantly. At the end of fifty-two days it was killed, and it presented perfectly marked tuberculous lesions, situated especially about the mesentry and intestine. The mesenteric glands presented infiltrarion in so high a degree that many were of the size of the first. Their total mass weighed 1650 grammes. All the ganglia of the bronchi and mediastinum were enlarged, and the lung was full of crude tubercle. The other two heifers presented not less perfectly marked alterations, while the fourth, to which none of the tuberculous matter had been administered, remained intact and increased in flesh.

It is proved, therefore, that animals of the bovine species contract tuberculosis by digestive ingestion, just as they take carbuncle and cowpock, as sheep take the rot, as the horse takes glanders, and as man takes small-pox. The human digestive tube constitutes an easy channel for tuberculous contagion. If bovine phthisis be identical with tuberculosis in the human species, there is, in the use of the flesh of tuberculous animals, a danger to which the poor are more especially exposed.—*Med. Press and Circular.*

Mortality for the Month of June, 1869:—

CAUSES OF DEATH.

Accidents, burned,	1	Diphtheria,	2	Lungs, congestion of,	2
" drowned,	5	Dropsy,	6	" emphysema of,	1
" concussion of brain,	1	" abdominal,	1	Measles,	31
" in plaining mill,	1	Dysentery,	6	" and diarrhœa,	2
" poisoned,	1	" & convulsions,	1	Meningitis, cerebro-spinal,	3
" injuries from knife,	1	Embrolism of pulmonary artery from phlebitis,	1	" tubercular,	3
" railroad,	5	Entero-colitis,	1	Nutrition, defective,	1
" swallowing foreign substance,	1	Enteritis,	1	Old-age,	5
" scalded,	1	Erysipelas,	1	Paralysis,	3
Abscess-pelvic,	1	" of face,	1	Putella, fracture of,	1
Apoplexy,	7	Fever, congestive,	1	Peritonitis,	1
Asphyxia,	2	" puerperal,	5	" puerperal,	2
Births, premature,	23	" remittent,	1	" traumatic,	1
" still,	40	" scarlet,	50	Pharynx, cancer of,	1
Bowels, inflammation,	4	" " and hydrocephalus,	1	Pneumonia,	22
Brain, congestion of,	3	" typhoid,	12	" and measles,	1
" disease of,	2	" typhus,	2	" broncho,	3
" inflammation,	11	Gastritis,	4	" typhoid,	2
" & lungs, "	1	" and bowels inflammation,	1	Rheumatism, inflammatory,	1
" softening of,	1	Hæmoptysis,	1	Scrofula,	1
Bronchitis,	3	Heart, disease of,	4	Spine, fracture of,	1
" hepatitis & icterus,	1	" valvular "	1	Shock from injuries,	1
" capillary,	1	Hernia, incarcerated,	1	Suicide,	2
Breast, cancer of,	2	Hydrothorax,	1	Small pox,	2
Cerebritis,	1	Hydrocephalus,	9	Tabes mesenterica,	8
Cholera infantum,	14	" acute,	2	Teething,	7
Convulsions,	33	Inanition,	13	" and convulsions,	5
Consumption,	37	Intemperance,	2	" and diarrhœa,	3
Croup,	1	Kidneys, Bright's disease of,	1	Tetanus, traumatic,	1
" membranous,	1	" and cystitis,	1	Tongue, cancer of,	1
Cyanch, maligna,	1	Larynx, stricture of,	1	Thrush,	1
Debility,	2	Laryngitis,	1	Urine, suppression of,	1
" & convulsions,	1	Liver, congestion and inflammation with uremia,	1	Vitality, deficient,	1
Delirium tremens,	3	" softening of,	1	Whooping-cough,	8
Diarrhœa,	7			" and pneumonia,	1
" chronic,	4			Unknown,	5
				Total,	434

COMPARISON.

Deaths in June, 1869, 434 | Deaths in June, 1868, 305 | Increase, 129
Deaths in May, 1869, 372 | Increase, 62

AGES.

Under 1	122	30 to 40	31	80 to 90	0
1 to 3	96	40 to 50	21	90 to 100	1
3 to 5	36	50 to 60	23	Unknown	1
5 to 10	35	60 to 70	10		
10 to 20	14	70 to 80	8	Total,	434
20 to 30	36				

Males, 241	Females, 193	Total, 434
Single, 334	Married 100	Total, 434
White, 429	Colored, 5	Total, 434

NATIVITY.

Bohemia,	4	Germany,	56	Scotland,	3
Canada,	6	Holland,	7	Sweden,	37
Chicago, Native,	61	Ireland,	38	Switzerland,	1
Chicago, Foreign,	132	New Brunswick,	1	Wales,	1
U. S., other parts,	56	Norway,	17	Unknown,	2
Denmark,	3	Poland,	1		
England,	7	Prince Edward Island	1	Total,	434

MORTALITY BY WARDS FOR THE MONTH.

Wards.	Mortality.	Pop. in 1868.	One death in
1	8	9,094	1,136¾
2	18	13,074	726⅓
3	21	15,076	718
4	21	17,796	847½
5	29	16,033	552 5-6
6	18	13,083	726 5-6
7	40	25,492	637½
8	30	15,813	523⅔
9	25	19,297	772
10	7	12,925	1,846½
11	18	14,340	796⅔
12	36	17,485	485⅔
13	11	11,164	1,015
14	14	14,839	1,052¾
15	29	21,078	726 4-5
16	13	15,465	1,189⅔

Mortality.	
Unknown Ward,	1
Accidents,	17
County Hospital,	10
Home for Friendless,	3
Immigrants,	42
Mercy Hospital,	4
Protestant Orphan Asylum,	2
St. Luke's Hospital,	1
St. Joseph Orphan Asylum,	13
Suicide,	2
Police Station,	1
Total,	434

JEFFERSON MEDICAL COLLEGE, PHILADELPHIA.

THE NEXT ANNUAL SESSION will commence on the 2d Monday in October, 1869. Preliminary Lectures will be given on the first Monday in September.

FACULTY.

JOSEPH PANCOAST, M.D., Professor of Anatomy.
SAMUEL D. GROSS, M.D., Professor of Surgery.
S. HENRY DICKSON, M.D., Professor of Practice of Medicine.
ELLERSLIE WALLACE, M.D., Professor of Obstetrics.
B. HOWARD RAND, M.D., Professor of Chemistry.
JOHN B. BIDDLE, M.D., Professor of Materia Medica.
J. AITKEN MEIGS, M.D., Professor of Institutes of Medicine.

Fees for full course (in common with all the regular Colleges of Philadelphia and New York), $140; Matriculation, $5; Graduation, $30.

Board from $5 to $7 per week. Clinical Instruction will be given daily at the College and twice a week at the Philadelphia and Pennsylvania Hospitals. Ample material for Dissection is provided under the new Anatomy Act.

For full particulars see the "Annual Announcement," which will be sent on application to

B. HOWARD RAND, M.D.,
Dean of the Faculty.

BELLEVUE HOSPITAL MEDICAL COLLEGE,

CITY OF NEW YORK.

SESSION OF 1869-'70.

FACULTY.

ISAAC E. TAYLOR, M.D.,
Emeritus Prof. of Obstetrics and Diseases of Women and Children, and President of the College.

JAMES R. WOOD, M.D., LL.D.,
Emeritus Prof. of Surgery.

FORDYCE BARKER, M.D.,
Prof. of Clinical Midwifery.

FRANK H. HAMILTON, M.D.,
Prof. of Practice of Surgery, with Operations and Clinical Surgery.

LEWIS. A. SAYRE, M.D.,
Prof. of Orthopedic Surgery and Clinical Surgery.

ALEXANDER B. MOTT, M.D.,
Prof. of Surgical Anatomy, with Operations and Clinical Surgery.

BENJAMIN W. McCREADY, M.D.,
Prof. of Materia Medica and Therapeutics and Clinical Medicine,

WILLIAM A. HAMMOND, M.D.,
Prof. of Diseases of the Mind and Nervous System and Clinical Medicine.

GEORGE T. ELLIOT, JR., M.D.,
Prof. of Obstetrics and Diseases of Women and Children and Clinical Midwifery.

STEPHEN SMITH, M.D.,
Prof. of Descriptive and Comparative Anatomy and Clinical Surgery.

AUSTIN FLINT, M.D.,
Prof. of Principles and Practice of Medicine and Clinical Medicine.

W. H. VAN BUREN, M.D.,
Prof. of Principles of Surgery, with diseases of the Genito-Urinary System and Clinical Surgery.

R. OGDEN DOREMUS, M.D.,
Prof. of Chemistry and Toxicology.

AUSTIN FLINT, JR., M.D.,
Prof. of Physiology and Microscopy, and Secretary of the Faculty.

The preliminary Term will open on Wednesday, September 15th, 1869, and will continue until the opening of the Regular Session, October 13th, 1869. A distinctive feature in the method of Instruction in this College is the union of Clinical and Didactic Teaching; and all the Lectures are given within the Hospital grounds. The same number of Didactic and Clinical Lectures will be given during the Preliminary as during the Regular Term.

FEES FOR THE REGULAR SESSION.

Fees for Tickets to all the Lectures during the Preliminary and Regular Term, including Clinical Lectures,	$140 00
Matriculation Fee,	5 00
Demonstrator's Ticket (including material for Dissection),	10 00
Graduation Fee,	30 00
The Collegiate Course, one year (including all Lectures in Winter and Summer, and Summer Recitations,)	175 00

For the Annual Circular and Catalogue, giving Regulations for Graduation and other information, address the Secretary of the College, PROF. AUSTIN FLINT, JR., Bellevue Hospital Medical College.

BELLEVUE PLACE,

For the care and treatment of Nervous and Insane Invalids.

Address **R. J. PATTERSON, M. D.,**

Jan. 1, 1869. **Batavia, Ill.**

RELIABLE VACCINE MATTER CAN BE HAD OF
DR S. A. McWILLIAMS,
166 STATE STREET, CHICAGO.

ROBERT FERGUS' SONS,
BOOK & JOB PRINTERS,
12 & 14 CLARK STREET.

Moorfields. First American Edition, with Additions. Illustrated with 216 engravings on wood, and six colored plates, together with selections from the Test-Types of Prof. E. Jaeger and Dr. H. Sneller. Philadelphia: Henry C. Lea. 1869.

This is a full-sized octavo of 736 pages, substantially bound in leather, and on fair type and paper. It is intended to constitute a complete treatise on diseases, injuries, and defects of the organs of vision. This will be found one of the best among many works relating to the same department of medicine and surgery.

Report of the Board of Health of New York for the year 1867.

This is a full-sized octavo volume, of 635 pages, with many valuable illustrations. To those interested in sanitary science and hygiene it is a volume of special interest. To the ordinary practitioner it furnishes many facts calculated to increase his knowledge of the etiology of diseases, and consequently of the means for their prevention. It contains a very full and interesting account of the disease called the "Cattle Plague," in all its relations.

We presume copies can be obtained by addressing the Secretary of the Board, Emmons Clark, New York.

Correspondence.

CASE OF SUPPOSED AMPUTATION OF THE ARM OF FŒTUS IN UTERO, FROM MENTAL EMOTION.

WYANET, ILL., *August 15, 1867.*

MR. EDITOR:—Mrs. E. H., of this place, was confined on the 11th of October, 1868, by Dr. P. J. Mulvane. The confinement lasted four hours, and it was observed that the left arm of the child had been amputated at the middle third of the

humeral region. Upon investigation, it was ascertained that the mother, shortly after becoming pregnant, visited in the East, and while traveling on the cars witnessed the great toe of a child amputated by the car door shutting upon it violently. The mother attributes the cause of the arm amputation, from the sight of the last mentioned. I have seen the child, which is well and hearty, and since it is a case of unusual interest to me, I thought it might be of sufficient interest for publication.

J. L. KITCHEN, M.D.

Editorial.

MERCY HOJPITAL.—The account of the new Mercy Hospital building, and the address at the laying of the corner stone, given in another part of this number of THE EXAMINER, are copied from the *Daily Republican*, of this city. The building is rapidly progressing, the walls being nearly ready for the roof. Most of our readers will be pleased to learn that arrangements have been made by which a new building for the Chicago Medical College will be erected on a part of the Hospital grounds, early next year.

CHICAGO HOSPITAL FOR WOMEN AND CHILDREN.—This institution has been removed to 402 North State street. We understand this has been selected as its permanent location. The Woman's Hospital has become one of the established institutions of this city. It has a rather formidable array of *consulting* physicians, surgeons, obstetrians, and opthalmologists, but is practically under the immediate care of Miss Doctoress THOMPSON.

MEDICAL COLLEGES.—We have received the Announcements of most of the Medical Colleges of the country in reference to the annual coursesof instruction to be commenced in October and November next. Very few of them indicate any change from the usual routine of short lecture terms and heterogenous

crowding of instruction on all the principal branches of medicine upon the same students, in the compass of eighteen weeks. It might be well expressed in "*large promises to be fulfilled in a remarkably short period of time, with unequalled facilities for accomplishing the work.*" Indications of progress are, however, visible in some quarters. A new school has been organized in St. Louis, called the "Saint Louis College of Physicians and Surgeons," with a full faculty, five months lecture term and a division of the branches into junior and senior courses, with an optional third course. This is a full recognition of the principle of consecutive order of studies and division of the classes, and is consequently a long step in the right direction. We hope the faculty will be sustained by the profession, because, if they are, they will soon follow the example of the Chicago Medical College, and adopt the complete system of *three consecutive courses of six months each*, with a fair standard of preliminary education, which is what the profession demands, and nothing short of which can afford to the student the facilities he needs for gaining an adequate knowledge of medicine. It is the plain duty of the profession everywhere to promptly sustain those colleges that do break over the old and absurd routine of short terms and heterogenous and repetitional teaching, simply because such a course is the only one that will speedily ensure the universal adoption of theimprovements in our system of medical college instruction, which all acknowledge are so much needed.

National Library.—We call the special attention of our readers to the following circular, and hope each one will contribute something to so desirable an object.—[Editor.]

Washington, D. C.

The Medical Profession, and scholars generally, are aware of the ephemeral form in which most of the early American contributions to the literature of medicine were given to the world, and, indeed, in which many of the more recent are being published. This condition of much of our professional literature is deeply regretted by all, and particularly by those whose taste and research lead them to refer to this class of works, when the fact is made apparent that whole editions of tracts and

books have entirely perished through neglect. With a view to provide against such a contingency, and preserve, for the benefit of the profession, in some accessible and central locality, copies of all home medical publications, the American Medical Association, at its annual meeting in May last, resolved to establish at Washington, D. C., a Library or Repository of American medical works, to which it is believed all the current medical literature of our country will be cheerfully, promptly, and constantly contributed.

It is designed that this repository shall contain copies of every contribution by American physicians to the literature and science of medicine, from the earliest settlement of our country, no matter how or where published, including all the books, pamphlets, journals, and even unpublished manuscripts that can be collected.

Nearly all physicians have some book or pamphlet of the character indicated, which may contain facts relative to the diseases of his section, published nowhere else, which they can contribute without inconvenience, and which of itself is of trifling value, yet when many such treatises are assembled together from all parts of our country, embracing its nosology from the earliest period of its settlement, they will form a collection of the greatest importance to the profession.

The Librarian of Congress has kindly consented to receive and preserve as a special deposit, in the Government fire-proof building, any collection of medical works the American Medical Association may make, and will catalogue and keep them in condition to be readily consulted. The accommodation thus offered the Association for accumulating and preserving its library free of cost is generous and most encouraging. Gentlemen having scarce and valuable American medical publications, will not hesitate to deposit them in such a safe, central, and national repository, where they will be preserved from destruction and their usefulness secured to the profession.

An appeal for contributions to this library is now made, personally and distinctly, to each and every American Physician, Medical Publisher, and Editor, to deposit copies of their works in this repository, where they will be carefully kept for reference and catalogued with the name of the donor.

We, the undersigned, members of the American Medical Association, having been selected to carry into effect, as far as practicable, the resolution of the Association to establish a Library, have now completed all the necessary arrangements for the reception and preservation of those books which may be

sent to our care. Contributions of the class of works mentioned are therefore respectfully and earnestly solicited from every source. Packages may be sent by mail or by Adams' express to either of us, which will be promptly acknowledged on reception, and a record of titles kept. The library mark of the Association will be pasted on the inside of the cover of each volume, which will contain also the name of the donor.

Hoping that you may further the project to the extent of adding at least your own productions,

We remain, respectfully,

ROBERT REYBURN, M.D., *Librarian.*
JOSEPH M. TONER, M.D., *Library Committee.*

ETHERIZATION AND BOSTON.—That Bostonians are remarkably sensitive on the subject of Etherization and its dangers, is evident from the number of certificates and letters we publish in the present number of THE EXAMINER, concerning the statement made by Dr. POWELL, at the recent meeting of the Illinois State Medical Society.

If their sensitiveness had not been remarkable, they would probably have delayed the certificate business long enough to have, at least, asked for a note of explanation either from the Secretary of the Society or Dr. POWELL, or both. The history of the matter, so far as relates to the proceedings of the Illinois State Medical Society, is as follows: The comparative danger of different anæsthetics being the subject immediately under discussion, Dr. POWELL related the fact, that while on a visit to one of the hospitals in Boston, he saw ether administered to a patient who was to undergo some operation on the urethra. He said the patient passed under the influence of the anæsthetic, and the surgeon commenced the operation, when it was soon noticed that respiration had ceased. Immediate efforts were made to resuscitate the patient, and with partial success, but not so complete but that he was soon wrapped up and removed from the room. Dr. POWELL called at the hospital on the following day, and on inquiring of the Assistant-Surgeon, understood him to say that the patient died on the previous night. Dr. POWELL simply stated what he supposed to be the facts, without saying whether the anæsthetic killed

the patient or not. The Secretary, in his minutes, put down the inference that would be drawn from Dr. POWELL's statement, instead of the statement itself. The only important error of fact in the statement of Dr. POWELL, and on which all errors of inference depended, was the misunderstanding or *misinformation* in regard to the patient having died the evening after the operation. It appears from the statement of Dr. CHEEVER and the hospital records, that he lived a considerable time after the operation, and died with disease of the heart. Would it not be well for all surgeons to ascertain whether patients have organic disease of the heart, before they give the anæsthetic, and when they operate publicly, to inform such practitioners and students as may be looking on, when such complication exists? Would not such precaution both lessen the number of accidents to patients and the liability to false inferences by others?

MR. EDITOR,—In the *Chicago Medical Examiner* for July, 1869, p. 407, in a "report of the nineteenth Annual Meeting of the Illinois State Medical Society, commencing May 18, 1869, in the City of Chicago"; on Thursday morning, the third day, in a general discussion on Chloroform and Ether, there occurs the following paragraph:—

"Dr. E. Powell stated the fact that a few years since he saw the Ether administered to a patient in the Hospital at Boston, Massachusetts, who died directly from the effects of the inhalation."

If by the Hospital at Boston, Massachusetts, is meant the Massachusetts General Hospital, the undersigned, comprising all the past and present surgeons of that Institution, now living (with the exception of Dr. H. J. Bigelow, who is temporarily absent from the City), desire to say, that no patient ever died from the inhalation of Ether in that Hospital, nor are they cognizant of any such occurrence in Boston or elsewhere.

S. D. TOWNSEND, *late Surgeon M. G. H.*
HENRY G. CLARK,
SAMUEL CABOT,
GEO. H. GAY,
R. M. HODGES,
ALGERNON COOLIDGE,
} *Attending Surgeons.*
BENJ. S. SHAW, *Resident Physician.*

Boston, July 29, 1869.

Mr. Editor,—My attention having been called to a statement made by Dr. E. Powell, at the last annual meeting of the Illinois State Medical Society, and published in the *Chicago Medical Examiner*, Vol. X., No 7, July, 1869, at page 407, to the effect that "he saw, a few years since, ether administered to a patient in the [City] Hospital at Boston, Mass., who died directly from the effects of the inhalation," I beg leave to say:—That I remember perfectly that on one occasion Dr. Powell was present in the amphitheatre of the City Hospital. I was operating on a patient, by Syme's operation, for perineal section. He became very seriously affected under the etherization; the operation was suspended; stimulants and artificial respiration were employed; the patient rallied; the operation was resumed and completed without further etherization, and the patient subsequently lived *twenty days*, and died of pyæmia. He was found to have had a serious valvular disease of the heart. He was an old man, enfeebled by extravasation of urine. For the details I would refer to the Hospital Records, Vol. XV., p. 104.

As the statement of Dr. Powell was wanting in precision and void of fact, I have thought it right to place the whole truth before you. No case has yet occurred at the City Hospital of death from an anæsthetic. Sulphuric ether (Squibb's, or Powers & Weightman's) is the anæsthetic employed in this Hospital.*

Respectfully, D. W. Cheever, M.D.
One of the Surgeons of the Boston City Hospital.

Boston, August, 1869.

From Vol. XV., Surgical Records of the Boston City Hospital, p. 104 *et seq.*:—

"Feb. 18, 1868. Edward Boice, laborer, æt. 50, No. 1 Friend St. Ten years since, contracted gonorrhœa. Five years ago, had stoppage of urine. Three years ago, had another stoppage, water coming away by drops greater part of the time, causing severe pain. Fourteen days ago, began to be troubled with stoppage and increased pain, which produced great straining; to micturate was almost impossible. Eight days ago, first noticed a small lump just anterior to the scrotum, which enlarged on straining (on under side of penis). Since that time the whole organ has been infiltrated, either by urine or serum, so that it was twice the normal size when seen to-day. About two inches of the base is as hard as a stick, the rest œdematous.

*As we are about going to press, we would here say that we wrote to Dr. Powell, a week ago yesterday, asking him for further advices as to what he saw in the case he alludes to in "the Hospital in Boston, Massachusetts." His reply has not yet come to hand.—Editor, August 10th, 1869.

Phymosis. The scrotum and perinæum are not affected. His urine had entirely stopped, so that he had not urinated for the last twenty-four hours. Bladder very much distended. In great misery.

"Seen by Dr. Cheever at 12, M., and it was found that the urethra was entirely closed about two inches from the meatus. Stricture very firm indeed. He punctured the bladder through the rectum, and drew off about two pints of urine. Removed the canula, and allowed it to dribble through into the rectum. Made three incisions in the base of the penis, and ordered him to be kept under opiates if in pain.

"Feb. 21st.—Etherized and placed in the lithotomy position. A sharp-pointed, grooved staff was passed into the urethra, but it was found impossible to insert it over an inch. An incision was then made down upon the urethra anterior to the scrotum, and the urethra laid open nearly two inches.

This allowed the staff to pass along beneath the scrotum, but another obstruction and a false passage were found. At this time the patient became very feeble. Respiration stopped. Pulse very slow and feeble—at last it stopped. Place him upon his back, and by persevering in artificial respiration, by throwing both arms about the head and then down against the sides, succeeded in restoring patient to life. No more ether was given. An incision was made down upon the bulb, urethra found and opened, and an elastic catheter passed into the bladder and kept there.

"Evening visit. Good pulse, but slightly delirious. Water passes freely through the catheter.

"Feb. 22.—Passed a comfortable night and is rational now. Is comfortable. * *

"Feb. 27.—Rested very well during the night. Swelling of the knee increased. Effusion into the joint. Whole leg nearly to the hip more or less œdematous. Blush of knee and leg increased. Veins of thigh loaded. Complains of pain in the knee. No chills or sweats. Wound in perinenm and penis looks well.

* * * * * * * * * *

"March 12.—A very restless night. Hiccoughs and considerable pain. Abdomen very tympanitic and a slight blush just above the pubes. Pulse feeble. Appetite poor. Evidently failing. Emesis. Evening—Failing. But very little urine. Pulse feeble. Countenance pale. 10.40 P.M. Dead. Caused probably by pyæmia and peritonitis. No autopsy."

A true copy, GEORGE B. STEVENS, *House Surgeon.*

Mortality for the Month of July, 1869:—

Accident, burned	2	" general	3	tion of	2
" brain, concussion of,	1	Delirium tremens	2	Laryngitis	1
" drowned	13	Diarrhœa	31	Liver, cirrhosis and enlargement of	1
" fall	2	" and convulsions,	4	Liver, hæmorrhage of,	1
" fracture of skull	1	" and teething	1	Lungs, congestion of	1
" by machinery	2	" and whooping-cough	1	Manslaughter	2
" dose of aconite	1	" chronic	3	Measles	34
" unloading vessel	1	Diphtheria	11	" and pneumonia	2
" rupture of blood vessel	1	Dropsy	7	" and whooping-cough	1
" railroad	4	Dyspepsia	1	Meningitis	5
Anæmia	2	Dysentery	18	" cerebro-spinal,	4
Aneurism adorta, rupture of	1	" acute	2	" tubercular	5
Anus, imperforate	1	" and bronchitis,	1	Mumps	1
Apoplexy	1	Empyema	1	Nutrition, defective	2
Births, premature	18	Encephalitis	2	Old age	6
" still	47	Entero-colitis	2	Parotitis	1
" tedious	1	Enteritis	15	Paralysis	2
Bowels, inflammation,	6	Exhaustion	1	" and brain, softening of	1
" obstruction of	2	Erysipelas	2	Pericarditis	1
Brain, congestion of	5	Fever, congestive	1	Peritonitis	6
" stomach and bowels, inflammation of	1	" puerperal	3	" puerperal	3
" inflammation	5	" remittent	3	Pneumonia	16
" softening of	1	" scarlet	61	" broncho	1
Bronchitis	2	" " malignant,	5	" and measles,	1
" and whooping-cough	1	" " and convulsions	2	" and conjestion of lungs	1
Cancer of femoral artery and gangrene	1	" " and abscess neck,	1	Rheumatism	1
Cancer, ventricle	1	" typhoid	17	Scrofula	1
Childbirth	2	" typhus	1	Small-pox	2
Chlorosis	1	Gangrene, traumatic, result of accident	1	Spine, disease of	2
Cholera infantum	186	Gastritis	2	Suicide	2
" " and teething,	1	Gastro-enteritis	1	Sun-stroke	3
Cholera morbus	4	Heart, disease of	9	Syphilis, hereditary	1
Convulsions	72	" and liver, disease of	1	Tabes, mesenterica	25
" and teething,	1	" dropsy of	1	Teething	15
Croup	4	" hypertrophy of,	2	" and convulsions,	3
" diphtheretic	1	" rupture of	1	" and diarrhœa	3
Consumption	39	" organic disease of	3	Thigh, amputation of, from wound of knee joint	1
" and gastritis,	1	Hemipligia	1	Uremia	1
Cyanosis	2	Hepatitis, chronic	1	Uterus, cancer of	1
Debility	8	Hydrocephalus	8	Whooping-cough	11
		" acute	3	" and convulsions,	2
		" and teething,	1	" and teething	1
		Inanition	15	Worms, stomach	1
		Intemperance	1	Unknown	2
		Jaundice	1		
		Kidneys, Bright's disease of	2	Total	815
		Kidneys, inflamma-			

COMPARISON.

Deaths in July, 1869, 815 | Deaths in June, 1868, 892 | Decrease, 83
Deaths in June, 1869, 434. | Increase, 381

AGES.

Under 1	392	30 to 40	39	80 to 90	4
1 to 3	158	40 to 50	31	90 to 100	0
3 to 5	39	50 to 60	15	Unknown	1
5 to 10	49	60 to 70	16		
10 to 20	31	70 to 80	5	Total,	815
20 to 30	35				

Males,	433	Females,	382	Total,	815
Single,	702	Married	113	Total,	815
White,	811	Colored,	4	Total,	815

NATIVITY.

Bohemia,	4	England,	8	Sweden,	30
Canada,	10	France,	2	Switzerland,	1
Chicago, Native,	175	Germany,	71	Unknown,	4
Chicago, Foreign,	326	Ireland,	45		
U. S., other parts,	109	Norway,	22	Total,	815
Denmark,	3	Scotland,	5		

MORTALITY BY WARDS FOR THE MONTH.

Wards.	Mortality.	Pop. in 1868.	One death in
1	8	9,094	1,136¼
2	16	13,074	817⅛
3	50	15,076	301½
4	54	17,796	329½
5	40	16,033	400¾
6	49	13,083	280 5-6
7	87	25,492	293
8	66	15,813	239 3-5
9	45	19,297	428 7-8
10	25	12,925	517
11	46	14,340	312
12	74	17,485	236½
13	29	11,164	385
14	43	14,839	345
15	41	21,078	514
16	32	15,465	483⅓

Mortality.	
Accidents,	28
Convent of Sacred Heart,	1
County Hospital,	11
Deaconess Hospital,	1
Home for Friendless,	2
Immigrants,	44
Jewish Hospital,	1
Mercy Hospital,	1
Manslaughter,	2
Protestant Orphan Asylum,	2
St. Joseph Orphan Asylum,	13
St. Luke's Hospital,	2
Suicide,	2
Total,	815

How to Prevent Typhoid Fever.—In the British Medical Journal of March 28, Dr. Wm. Budd advocates the following means to prevent the spread of typhoid fever:

The means by which typhoid fever may be prevented from spreading are very simple, very sure, and their cost next to nothing. They are founded on the discovery that the poison by which this fever spreads is almost entirely contained in the discharges from the bowels. These discharges infect—1. The air of the sick room; 2. The bed and linen of the patient; 3. The privy and the cesspool, or the drains proceeding from them. From the privy or drain, the poison often soaks into the well, and infects the drinking-water. This last when it happens, is of all forms of fever-poisoning the most deadly. In these various ways, the infection proceeding from the bowel-discharges often

spreads the fever far and wide. The one great thing to aim at, therefore, is to disinfect these discharges on their very escape from the body, and before they are carried from the sick room. This may be perfectly done by the use of disinfectants. One of the best is made of green copperas. This substance, which is used by all shoemakers, is very cheap, and may be had everywhere. A pound and a-half of green copperas to a gallon of water is the proper strength. A teacupful of this liquor, put into the night-pan every time it is used by the patient, renders the bowel discharge perfectly harmless. To disinfect the bed and body linen, and bedding generally, chloride of lime or MacDougall's powder is more convenient. These powders should be sprinkled by means of a common dredger, on soiled spots on the linen, and about the room, to purify the air. All articles of bed and body linen should be plunged, immediately on their removal, from the bed, into a bucket of water containing a tablespoonful of chloride of lime or MacDougall's powder, and should be boiled before being washed. The privy, or closet, and all drains communicating with it, should be flushed twice daily with the green copperas liquid or carbolic acid, diluted with water. In the event of death, the body should be placed, as soon as possible in a coffin sprinkled with disinfectants. Early burial is on all accounts, desirable. In towns and villages where the fever is already prevalent, the last rule should be put in force for all houses, whether there be fever in them or not, and for all public drains. As the hands of those attending on the sick often become unavoidably soiled by the discharges from the bowels, they should be frequently washed. The sick-room should be kept clean and well ventilated, day and night. The greatest possible care should be taken with regard to the drinking-water. Where there is the slightest risk of its having become tainted with fever poison, water should be got from a pure source, or should at least be boiled before being drank. Immediately after the illness is over, whether ending in death or recovery, the dresses worn by the nurse should be washed or destroyed, and the bed and room occupied by the sick should be thoroughly disinfected. These are golden rules. Where they are neglected, the fever may become a deadly scourge. Where they are strictly carried out, it seldom spreads beyond the person first attacked.

"N. B.—A yard of thin wide-width gutta percha placed under the blanket, under the breech of the patient, by effectually preventing the discharges from soaking into the bed, is a great additional safeguard."—*New Orleans Jour. of Med.*

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CITY OF NEW YORK.

SESSION OF 1869-'70.

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CHICAGO MEDICAL EXAMINER.

N. S. DAVIS, M.D., EDITOR.

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Original Contributions.

ARTICLE XXXIII.

REPORT OF COMMITTEE ON INSANITY.

(Read before the Illinois State Medical Society, May, 1869.)

TO THE ILLINOIS STATE MEDICAL SOCIETY:

Your Committee on Insanity make the following report:

The resolution creating the Committee charges it with the duty of inquiring, "What legislation, if any, is necessary to secure the rights and comforts of the insane previous to their admission to hospital care and treatment?" The subject, therefore, suggests a review of the laws in force in regard to the admission or commitment of insane persons to hospitals, and the Committee limit their report to medico-legal inquiries.

The statutes of Illinois are believed to be peculiar to this State, having no precedents in the country, outside its boundaries. They demand, as a prerequisite to receiving hospital care and treatment, that every possible form and case of insanity shall have a jury trial, the insane person being compelled to appear and remain present in open court during the trial, in order to determine the fact of the existence of insanity. The questions now arise: Are the provisions of this peculiar statute necessary in order to protect persons from wrongful imprisonment? Do they secure the rights and comforts of the insane? Or is it a legislation for exceptional cases? Is the law humane

in its bearings toward the insane? And if not, what legislation is desirable, as viewed from medico-legal standpoint by medical men?

That eminent jurist, Chief Justice Shaw, of the Supreme Judicial Court of Massachusetts, said: "The right to restrain an insane person of his liberty is found in that '*great law of humanity*,' which makes it necessary to confine those whose going at large would be dangerous to themselves or others. The necessity which creates the law creates the limitations of the law. If there is no right to exercise restraint for a fortnight, there is no right to exercise it for an hour; and if a man may be restrained in his own house, he may be restrained in an asylum. Besides, it is a principle in law, that an insane man has no will of his own. The question must then arise in each particular case, whether a person's own safety, or that of others, requires that he shall be restrained for a time, and whether restraint *is necessary for his restoration, or will be conducive thereto.* The restraint can continue as long as the necessity continues. This is the limitation, and the proper limitation."

Wharton and Stillè, in their Treatise on Medical Jurisprudence, say that: "There are necessarily cases of insanity, *when the health of the patient alone* requires confinement in an asylum, though there be no danger to himself or others. The law in such cases undoubtedly is, that confinement is justifiable if either the safety of the patient or others require it, or if it is necessary for his restoration to health."

Insane persons are none the less invalids than would be the case if the disease were located elsewhere than in the brain. Hospitals for insane persons are not prisons, designed for criminals, but places for the proper care and treatment of the sick. They are fitted and furnished so as to afford such safeguards, comforts, and appliances as are demanded for the best treatment of such invalids as may need to be committed to them, and who, on account of the character of the disease, cannot be as well cared for and treated at their homes. They are humane institutions, and their inmates are patients.

In other States than Illinois, what has been so aptly styled by Chief Justice Shaw as the "great law of humanity" is still recognized, in mainly intrusting the removal of insane persons from their homes, for hospital care and treatment, to the friends of the family (as counseled and advised by one or more physicians), who, more than others, are immediately interested in the welfare of the patient. But the law as it now stands in Illinois, with its cold formalities and damaging delays, interposes between the physician and his patient, between the husband and his sick wife, between the parent and his sick child, the brother and his invalid sister, and declares that in no case can an insane person receive hospital treatment within the bounds of the State, either in public or private institutions, either at public or private expense, without a public jury trial as to the fact of insanity.

In defence of the rigorous legal process now demanded, it is alleged that corrupt or incompetent physicians may be found, who, regardless or ignorant of their calling, *may* give fraudulent certificates of insanity; and that bribes *may* make the medical officers of hospitals for the insane accomplices in the crime of restraining sane persons under the guise of insanity.

Your Committee believe that the great crime of giving fraudulent certificates of insanity has never existed within the borders of the State; that false imprisonment, under the fraudulent plea of insanity, has not been substantiated in any one well authenticated case; and that the implied accusation of venality on the part of medical men is unjust. We are willing to admit that there may have been errors in diagnosis, though even this, so far as known, has not been substantiated. Patients have been sometimes adjudged insane, and so certified by medical examiners, and, when admitted to hospital, are found to have recovered, pending delays in correspondence and removal, prior to admission. But admitting that errors are liable to occur, and that bribes may procure false imprisonment, all experience and observation, throughout the whole country, go to show that the evil, if it really exists outside of morbid imaginations, must be only in the smallest possible proportions. Legislation

should be for the greatest good of the overwhelming majorities; and if most rarely an exceptional error or crime may be committed, the same may be said of the opinions and acts of men in all professions, and of the various opinions of medical men in regard to other patients than those who are insane, and in regard to which the law does not by special enactment presume to interfere. False imprisonment is every day resorted to in our large commercial cities by the officers of the law themselves, upon mere suspicion of crime; and false imprisonment may occur under the present law upon the plea of insanity, where the most evenly balanced cases are submitted to a jury of unskilled men who are believed to be not the most competent men to decide any purely medical question, and especially to determine a closely contested case of insanity. In all such cases, where the patient is undemonstrative in conduct, and where the morbid mental manifestations are obscure, the jury are wholly dependent upon medical opinions, which might much more profitably go directly to the court. Unskilled juries are not allowed to be judges of questions in law science, neither are they competent, nor should they be allowed to decide questions in medical science.

It is believed by those who have had largest opportunities for observation, that in ninety-nine cases out of every hundred that go to our hospitals, probably not more than two are of so obscure a type as to cause the slightest doubt in the mind of any physician; and surely such demonstrative cases need no judicial court investigation, and no jury trial as to the fact of insanity; and in the few doubtful, obscure, or evenly-balanced cases, the jury being wholly incompetent to decide, it follows that the jury, in regard to these purely scientific medical questions, is more expensive, and more ornamental than useful.

But there are a few exceptional cases which occupy that debatable ground on one or the other side of the diffused line of demarkation between possible sanity and undoubted insanity; and these may best be determined by a special commission of medical men, or possibly by a mixed commission, as proposed by Dr. Ray, composed of both medical and legal men; one or

more physicians, "in order that the medical inquiry should take the proper course, and a lawyer, that the legal proceedings should be correct, and the testimony should have legal correctness." It is a hardship and an inhumanity to subject the ninety-nine in every one hundred cases to the delays, expenses, exposures, and shock to the feelings of a jury trial in order to avoid a possible injustice to one single exceptional case which may be with ease specially provided for.

Your Committee have arrived at the opinion, that the laws in force in Illinois, in regard to the commitment of the insane for hospital treatment, are, in their application to a great majority of cases, positively damaging in their requirements and tendencies.

There are, for instance, certain cases of puerperal mania in which the patient has been subjected to the shock of parturition, drainage by hemorrhage, drainage by the lochial discharge, drainage by lactation, and still further depressed in force by abstinence from food, and loss of sleep. The case is one of excitement without force, with tendencies to fatal exhaustion. The chairman of your Committee has witnessed the trial, and I had almost said the execution, of one such case of puerperal mania, in which the excitement was terribly augmented by the presence of a gaping crowd. A lady of culture and refinement, from being comparatively quiet and manageable, gave way to loud vociferations, and finally to maniacal ravings, and the liberal use of the most obscene language, which is somewhat characteristic of these cases. The trial was as public as the most ardent admirers of the law could wish. Two men held the patient for two long hours, in the court room, awaiting the assembling of court, and the empanneling of a jury. The jurymen were selected, with one exception, from the crowd of seeming vagrants, who habitually hang about certain temples of justice in large cities. The court, in obedience to strict forms, goes through the fearful mockery of announcing to the lady on trial, and whose mind at the moment was in chaotic fury, "Madam, you are charged with being insane." "Are you ready for trial?" "Do you desire counsel?" The "profes-

sionals" in the jury-box are then supposed to listen to testimony in regard to the lady on trial, charged with having disease of the brain, and consequent morbid mental manifestations; and after having gravely asked the medical witness, whether the lady was "free from infectious disease and vermin," and whether there had "been any family quarrels of a domestic nature," and one or two other equally momentous questions, they retire for consultation. This case represents a class, and your Committee need scarcely say that such patients have no surplus strength to squander in court house exposures, and that such exhibitions are wholly unnecessary; that they are not demanded by the advancing science or civilization of the age; that they tend to jeopard the recovery of the patient, and sometimes life itself; and that they are revolting to the cultivated and humane instincts of a Christianized people.

There is another class of insane persons, some of them young females, just passing into the period of womanhood, some of them suicidal, in which the delusions are obscure, and the intellectual impairment is overshadowed by a perverted condition of the whole moral character of the individual. These timid persons need the protection and treatment which a well-conducted hospital alone can give; but to compel them to appear in open court as the subjects of inquisition, where their diseases and infirmities shall be recorded and published, and where also in connection the infirmities and infelicities of the family are often dragged to public gaze, is shocking to the feelings of the suffering patient and the family, and an unnecessary, even wanton exposure of matters which the public have no claim to know. In nearly or quite all such cases the law is, in effect, prohibitory of hospital treatment, so odious are its requirements; and the effect is to substitute home imprisonment, or at best home custody merely, for proper curative treatment.

There are also aged insane persons, and others who are feeble, some of them in whom fatal exhaustion is imminent, and where an overland journey of fifteen or twenty miles, perhaps in open wagons, and inclement seasons, to attend inquisitions, would damage the patient and jeopard recovery.

Your Committee believe that these feeble patients should not be subjected to needless fatigue, exposure, or delays, but should find needed hospital treatment through a shorter and more humane process than the law now provides. In some instances it is well known that several weeks or even months may elapse during which no court may be in session within the county where patients reside, and meantime the patient may remain in jail, associated with criminals awaiting trial, and be subjected to damaging delays, as well as damaging associations.

Your Committee are of the opinion, which accords also with all experience and observation, that, *as a rule*, insanity is only curable in its earliest stages, but that if skilful treatment be early applied, a very large majority of insane patients will recover; and that treatment in some well-managed hospital, while the case is still recent, affords the best available means for the recovery of the insane; that while every reasonable safeguard against false imprisonment should be given, laws should not be so restrictive as to result in rendering of no avail, even to the most quiet, unoffending insane person, the blessings of prompt curative treatment while the disease is amenable to treatment, and before confirmed lifelong insanity results. Your Committee believe that the laws in force put many hindrances in the way to the prompt use of those instrumentalities which are most efficient in promoting the comfort and recovery of the insane, and that its legitimate results are to leave many cases to become chronic and incurable, who should be restored to health, and that these patients, after having fruitlessly worn the families to whom they belong, and wasted their substance in vain efforts for relief, are finally thrown upon the State for a lifelong support.

As corroborative of our own views and opinions, the Committee think it not improper to introduce in this report the written opinions of several distinguished medical gentlemen who have had a large and varied experience in the treatment of the insane, extending over a period of a-quarter of a century, in which the study of the welfare of the insane has been the work of their whole professional lives.

Dr. Thomas S. Kirkbride, the venerable and distinguished Medical Superintendent of the Pennsylvania Hospital for the Insane, writes to your Committee as follows:—

"My opinion of your law can be expressed in a few words. I am quite sure that a jury trial is not required for more than one case out of one hundred that apply for admission, and to compel the other ninety-nine to resort to this process is a great wrong to the afflicted, their friends, and the community. The practical effect must be to consign many to hopeless insanity, for it will prevent proper treatment where alone it is successful in the early stages of the disease. No one will subject a friend to such wanton exposure as long as it can be avoided; and barred rooms at homes, and desolate out-houses will again become the abodes of this afflicted class as they were before the establishment of hospitals. Such a law is a gross interference with the rights of families, and indirectly exposes the community to the risks always attending irresponsible persons having their liberty. It benefits no one, and it seems to me can originate only from a want of knowledge of the subject, and a reliance upon the statements of persons still laboring under mental disease, or actuated by bad motives. These opinions have not been hastily formed, as you know they are the result of more than thirty years' experience among the insane, and the care in that time of considerably over five thousand patients."

Dr. John Curwin, for many years the Medical Superintendent of the State Hospital for the Insane, at Harrisburg, Pennsylvania, writes to the Committee as follows:—

"I believe the system of requiring a jury trial, before a patient can be admitted into a hospital for the insane, to be attended with infinite injury to the insane. It delays treatment; places them in the condition of criminals instead of sick persons; prevents early admission into institutions where alone they can have proper treatment; drags to public gaze the infirm, the weak and defenceless, who ought to be protected, shielded and cared for in the tenderest manner; exposes the private affairs of families and individuals to the gaping curiosity of the idle and busy bodies who delight in scandal; shocks all the finer feel-

ings of all who have any sensibility; compels many to be confined at home, or removed to a great distance, who might be soon cured by prompt and careful treatment, and puts them and their friends to an expense which they should not be called on to meet; and, in fact, I cannot see one redeeming feature in the plan. 'Tis a legislation for exceptional cases, which very rarely arise, and I have sometimes been inclined to suspect the sanity of any one who would insist on such a plan."

Dr. C. H. Nichols, Medical Superintendent of the Government Hospital for the Insane, at Washington, D. C., says, in a discussion of this subject, before the Association of Medical Superintendents of Hospitals for the Insane:—

"If a man suffering from the delirium of fever is bent on jumping out of his window, and a strong shutter or watch is placed in his way, there is just as much reason for raising the senseless cry of 'incarceration,' 'false imprisonment,' 'modern *lettre de cachet*,' 'alarming interference with the liberty of the citizen,' and so on to the end of the catalogue, as in ninety-nine hundred of every thousand persons found under treatment in our institutions for the insane. I speak deliberately. My opportunities for observation are known to you all." * * *

Again the same gentleman says:—

"One of the strongest objections to the judicial process is treating the insane, in one respect, as criminals are treated; that it is subjecting them to a process that has the odor of criminality about it. * * * Regarding insanity as a disease, and the claims of the insane to the tender and skilful treatment they need, as imperative, and not in any manner to be sacrificed, and fully believing that a judicial process to determine the question of insanity is not required in ordinary cases, either by the science or the humanity of the age more than in the delirium of fever, I am very anxious not to take the retrogade step."

Dr. Isaac Ray, our distinguished author on the Medical Jurisprudence of Insanity, says:—

"I have no question, from my own observation, that if you make the law more stringent than it is (that is, by requiring a

jury trial), the result will be precisely of that kind that has taken place in England, and will keep out those who ought to be taken care of in our hospitals, and will increase the number of those who will not be placed in hospitals at all. * * *

"We must bear in mind that we are legislating for those who are *really insane*, as well as those who are merely doubtfully so, and consider whether, in order to obviate an evil, that may happen once in a hundred cases, we are to subject the other ninety-nine to an examination that is entirely useless. It is a doubtful kind of legislation that produces more feeling than it prevents. I can easily imagine that in a small country town where everybody knows everybody else's business, an inquisition by a magistrate would scarcely increase the publicity, but it would have a very different effect in a very different kind of community. If that mode should be adopted in our large towns, its needs no Solomon to tell us that we shall have but very few admissions. Insanity is something which people do not care to have made public, and any kind of publicity that subjects the patient to observation and petty curiosity, is objectionable, and any legislation of the kind will operate as prohibitory. The ordinary method of placing patients in a hospital upon medical certificates, which has prevailed from time immemorial, should be legalized, so that we may be able to do that *legally* which we have always done by consent of the community.

Dr. John E. Tyler, Medical Superintendent of the McLean Asylum, at Boston, Massachusetts, says:—"If prompt and early treatment is important for the insane—and we know it is—and if the requisites for admission to a hospital are such extended formalities as to hinder the patient from entering it, of course we are damaging him vitally. But supposing that admission to the hospital is guarded by all the formalities that one can conceive of, I doubt whether the popular distrust would be relieved thereby. The formalities for admission to a hospital should be simple, such as can be complied with without trouble and without publicity. If they are many, and such as will necessarily bring the patient before others, they will certainly keep numbers from the hospital and proper treatment

who ought to have it, and thus do great wrong to the insane."

Your Committee believe that these opinions fully accord with those of all other medical men who have given much thought to all that pertains to the welfare of the insane throughout the country.

In conclusion, your Committee submit the following *project of a law*, which is designed more fully to determine certain relations of the insane—to promote the ends of justice, and enforce the claims of an enlightened humanity. This project of a law, it is proper to remark, is the embodiment of the wisdom of the Association of Medical Superintendents of American Institutions for the Insane, unanimously adopted at their annual meeting in June, 1868:—

AN ACT

To provide for the admission of certain classes of the Insane into Hospitals for the Insane, and their discharge therefrom.

SECTION 1. *Be it enacted, etc.*, That insane persons may be placed in a hospital for the insane, by their legal guardians, or by their relatives or friends, in case they have no guardians; but never without the certificate of one or more reputable physicians, after a personal examination, made within one week of the date thereof; and this certificate to be duly acknowledged and sworn to, or affirmed, before some magistrate or judicial officer, who shall certify to the genuineness of the signature, and to the respectability of the signer.

SEC. 2. On a written statement being addressed by some respectable person to any law judge, that a certain person, then confined in a hospital for the insane, is not insane, and is thus unjustly deprived of his liberty, the judge, at his discretion, shall appoint a commission of three persons, one of whom, at least, shall be a physician, and another a lawyer, who shall hear such evidence as may be offered touching the merits of the case, and, without summoning the party to meet them, shall have a personal interview with him, so managed as to prevent him, if possible, from suspecting its objects. They shall report their proceedings to the judge, and if, in their opinion, the party is not insane, the judge shall issue an order for his discharge.

SEC. 3. Whenever any person is acquitted, in a criminal suit, on the ground of insanity, the Jury shall declare this fact in their verdict; and the Court shall order the prisoner to be

committed to some place of confinement, for safe keeping, or treatment; there to be retained until he may be discharged in the manner provided in the next section.

SEC. 4. If any law judge shall be satisfied by the evidence presented to him, that the prisoner has recovered, and that the paroxysm of insanity, in which the criminal act was committed, was the first and only one he had ever experienced, he may order his unconditional discharge; if, however, it shall appear that such paroxysm of insanity was preceded by at least one other, then the Court may, in its discretion, appoint a guardian of his person, and to him commit the care of the prisoner, said guardian giving bonds for any damage his ward may commit; *Provided always*, That in case of homicide, or attempted homicide, the prisoner shall not be discharged, unless by the unanimous consent of the Superintendent and the Managers of the Hospital, and the Court before which he was tried.

SEC. 5. Insane persons may be placed in a hospital by order of any law judge, after the following course of proceedings, *viz.:* on statement in writing, of any respectable person, that a certain person is insane, and that the welfare of himself, or of others, requires his restraint, it shall be the duty of the judge to appoint immediately a commission, who shall inquire into, and report upon, the facts of the case. This commission shall be composed of three persons, one of whom, at least, shall be a physician and another a lawyer. In their inquisition, they shall hear such evidence as may be offered touching the merits of the case, as well as the statements of the party complained of, or of his counsel. If, in their opinion, it is a suitable case for confinement, the judge shall issue his warrant for such disposition of the insane person as will secure the object of the measure.

SEC. 6. On statement, in writing, to any law judge, by some friend of the party, that a certain party, placed in a hospital under the fifth section, is losing his bodily health, and that consequently his welfare would be promoted by his discharge; or, that his mental disorder has so far changed its character as to render his further confinement unnecessary, the judge shall make suitable inquisition into the merits of the case, and, according to its result, may, or may not, order the discharge of the party.

SEC. 7. Persons placed in any hospital for the insane may be removed therefrom by parties who have become responsible for the payment of their expenses; *provided*, that such obligation was the result of their own free act and accord, and not of

the operation of law, and that its terms require the removal of the patient in order to avoid further responsibility.

SEC. 8. If it shall be made to appear to any law judge that a certain insane person is manifestly suffering from the want of proper care or treatment, he shall order such person to be placed in some hospital for the insane, at the expense of those who are legally bound to maintain them.

SEC. 9. If the Superintendent or officers of any hospital for the insane shall receive any person into the hospital after full compliance with the provisions of the first section of this act, no responsibility shall be incurred by them for any detention in the hospital.

Your Committee beg leave to suggest the appointment of a committee of three members of this Society to memorialize the next Legislature of the State, in favor of enacting the substance of the foregoing project into a law.

R. J. PATTERSON,
G. R. BIBB,
D. W. YOUNG,
} *Committee.*

ARTICLE XXXIV.

MERCY HOSPITAL.

LAYING OF THE CORNER STONE.

ADDRESS BY Dr. N. S. DAVIS.

The ceremonies and impressive exercises connected with the laying of the corner-stone of the Mercy Hospital, took place on the afternoon of July 25, 1869, on the corner of Twenty-sixth Street and Calumet Avenue. A large crowd were in attendance, and, notwithstanding the intense heat, remained and listened with wrapt attention to the addresses, and throughout the whole of the interesting services. While the audience was gathering, and during the time of the laying of the stone, the Immaculate Conception Band, of Father Waldron's church, and Father Conway's Band, of St. James' church, were upon the stand, and added much to the interest of the exercises by their

excellent music. The Society of the Immaculate Conception were on the main stand in full uniform.

At 7 o'clock, the procession was formed in the old hospital and marched to the stand, the band meanwhile playing a solemn march. The procession was preceded by six acolytes, each bearing in his hand some holy symbol connected with the services. Following was the Very Rev. T. Halligan, Administrator, who was escorted, with the orator of the day, Dr. N. S. Davis, by the Reverend Fathers McDermott, Conway, Lyon, Scott, Cushman, Leyden, and Waldron, to the platform. The Very Rev. T. Halligan then proceeded to read in Latin the impressive service usual in the Catholic Church on such occasions. In this part of the ceremony he was assisted by the Reverend Fathers already named. At the conclusion of the opening services, architect Boyington placed in the receptacle prepared for it, the box containing the relics and curiosities, after which the stone was lowered to its place. The concluding ceremonies, consisting of blessing the stone and sprinkling it with holy water, were then accomplished, after which the procession reformed and marched back to the hospital.

Dr. Davis was then introduced, and spoke as follows:—

Fellow Citizens:—Until my arrival here, I expected you would be addressed by another, before I was called upon, and lest I should weary your patience, I have prepared to occupy you but a few minutes.

Nineteen years since, the City of Chicago contained less than 30,000 inhabitants; was supplied with only a limited amount of water, by an engine and pump at the foot of Lake Street, and was entirely destitute alike of sewers and public hospitals. The ground on which we now stand was covered with the coarse grass of the unoccupied prairie. The summer previous (1849) that dreaded pestilence, the epidemic cholera, had severely scourged our citizens, and was prevailing more moderately at the time to which I more particularly allude (the summer of 1850). The need of a permanent public hospital had been so far felt that a charter for one had been procured from the State Legislature at a previous session; and the city authorities were

making their first attempt at the construction of sewers, by putting down a three-cornered or triangular plank sewer in Clark Street, from the river to Lake Street. It was for the double purpose of protesting against the squandering of public money on such temporary and imperfect structures, and awakening the public attention to the whole subject of the sanitary improvement in our city, that your speaker announced a course of six public lectures on the sanitary condition of the city and the means for its improvement, the proceeds of which were to be used in opening a public hospital under the charter already alluded to. These lectures were given in the old State Street Market Hall, which has long since disappeared, and netted the trifling sum of $100, to which was added some contributions of $5 and $10, from four or five of the more prominent citizens, at the head of whom stood R. K. Swift, then a prosperous banker. With this limited sum of money, *twelve* beds were purchased and put into rooms on the third floor of the south part of the old Lake House, then occupied by a lady as a private boarding-house; and she was engaged to feed and nurse the patients at a specified sum per week. The beds were ready for the reception of patients by the first week of October, 1850, and were soon filled with patients, attended by the late Daniel Brainard as surgeon, and myself as physician. In the spring of 1851, the Trustees named in the charter, consisting of Judges Skinner and Dickey, and Dr. John Evans, finding it not easy to obtain sufficient subscriptions from our citizens to permanently sustain and endow the hospital, were induced to accept an offer made by the Sisters of Mercy, to take charge of it, and meet all the expenses of its management, except the rent of the necessary building. They immediately began to increase the number of beds, and soon occupied one-half of the old Lake House building, the rent of which was paid during the first three years by the contributions of a few citizens, aided by the Faculty of the Rush Medical College. From that time the institution passed entirely into the hands of the Sisters of Mercy, where it has remained till the present time. From the old Lake House, it was removed to a building on Kinzie Street,

where it remained only a few months. Then it occupied a building constructed for an orphan asylum, on Wabash Avenue, near Van Buren Street, several years, and from thence it was moved into the building originally constructed for a seminary for young ladies, on the grounds we now occupy. Its growth has been steady and uniform, until, from the small beginning just mentioned, it now lays the foundation of the magnificent structure whose corner-stone you have just placed in its proper position; a structure which will not only remain for ages an ornament to our city, but, what is far better, it will stand as a perpetual monument to the liberality and Christian charity of its founders, and an asylum for the suffering and afflicted of many generations. During its past brief history, without the aid of public appropriations or private endowments, and constantly embarrassed by the temporary structures it has occupied, it has accommodated and kindly treated more than 6000 human beings, suffering from serious diseases, at least one-fourth of whom have been cared for gratuitously. Its doors have been open alike to the afflicted of every class and creed. It has received the professional services, always gratuitous, of the most eminent members of the medical profession, among whom have been Daniel Brainard, Wm. B. Herrick, J. V. Z. Blaney, L. D. Boone, J. E. McGirr, H. A. Johnson, E. Andrews, W. H. Byford, D. T. Nelson, and your speaker. In regard to the ability and faithfulness of the Sisters of Mercy, in the management of the hospital, I can speak in terms of the fullest commendation. Having visited the institution, professionally, almost constantly, from its incipient organization to the present hour, I must say that in cleanliness, good order, kindly attention, and Christian liberality I have not seen them equaled in any other public hospital in this country. With the building now in process of erection, each department of the hospital will be amply provided for. Besides the public wards, there will be many rooms affording every comfort and convenience for the accommodation of such patients as are able to provide themselves with the comforts, as well as the necessaries, of life, and yet need the advantages for special treatment that the hospital

affords. Among its inmates heretofore have been patients from all the North-western States, as well as from the City of Chicago. To sustain such an institution, however, requires, in addition to the faithfulness and skill of its immediate attendants, the active aid and sympathy of the whole community. The untiring labors of the Sisters may be bestowed without money and without price; the Medical Faculty may give it the benefit of their highest skill without a fee; but to furnish it with food, fuel, light, water, and medicines requires money, and that, too, in larger quantity than can be derived for the payment of board by the patients. There are many of both sexes having no homes of their own, who, when taken sick, are not proper subjects to be made a county charge, and to whom the well-regulated public hospital affords the only safe resort. If their sickness proves severe, the little money on hand at the beginning is exhausted long before they are well, and they must remain gratuitously or be turned helpless away. There are others whose education, social relations, prejudices, perhaps, are such that they could not be induced to go into the public wards of a hospital for the city or county poor, and yet who are destitute of the means with which to pay for either board or the services of a physician or surgeon, and, yet, who would gladly avail themselves of the advantages of an institution like this, if a way was provided by which they could be admitted. Hence, when this noble structure shall have been finished; when the self sacrificing Sisters of Mercy shall have completed and furnished every room, from basement to attic, with themselves in readiness to care for the sick, and the board of physicians and surgeons ready to aid them, there will yet lack one thing to render its means of usefulness complete.

To supply this one thing, and make the Mercy Hospital of Chicago not only one of the best hospitals, but also one of the *noblest charities* in the world, it should receive such a pecuniary endowment as would make, at least, twenty of its beds perpetually free for the occupancy of those who are destitute as well as sick. *Twenty* beds thus free would accommodate an average o

150 patients per annum. Who can estimate the benefits that would result or the amount of human suffering that would be relieved in the lifetime of a single generation? And are there not twenty men within hearing of my voice who could each donate $1000, to be invested and held in trust, the interest of which would secure twenty free beds for suffering humanity? Is there any other way in which a like sum could be invested with a certainty of securing an equal amount of good?

To clothe the naked, to feed the hungry, to provide for and heal the sick are among the highest and most sacred injunctions of the Divine Author of Christianity.

However much the world of mankind may be divided in reference to religious creeds and ceremonies, there can be but one sentiment in regard to the universally binding character of these injunctions. They are broad in their scope as the brotherhood of man, and as binding as the divine impress can make them. Then, let every thoughtful man who has an abundance of this world's goods, reflect that for every dollar he will be called to render an account. Not as to whether he obtained it honestly or by fraud; not whether he expended it for the gratification of his pride or passions, or hoarded it in his safe, but in that great day of fina judgment, we are told the question will come, did ye clothe the naked; did ye feed the hungry; did ye visit the prisoner; did ye minister to the sick? Christianity demands of its votaries not negative virtues merely, but positive acts of charity and human kindness.

Then, fellow-citizens, while this noble structure is advancing to completion, let me entreat you to make such provisions, pecuniarly, as will secure to it the highest possible degree of usefulness, and you will thereby secure to yourselves, also, the reward of the Christian, namely, the consciousness of having added to the sum of human life and happiness.

After the public exercises the distinguished guests present were invited to an elegant collation, prepared by the Sisters, in the parlors of the old hospital. There were present beside the Very Rev. Father Halligan and the Reverend Fathers already mentioned, the orator of the day, Dr. Davis, the architect, Mr.

Boyington, Dr. Byford, Dr. Andrews, Dr. Johnson, and a number of others who, during the past years, have connected themselves prominently, by their charitable acts, with the institution. After doing justice to the viands prepared, the pleasant company enjoyed a social hour, and were invited to inspect the building and the proposed improvements.

The plans for the new hospital were made from suggestions that were offered by Dr. Edmun Andrews, who has spent much time abroad studying the construction and architecture of the most noted European hospitals. This hospital will contain every improvement, and be one of the most complete and perfect in this country.

The following is a description of the hospital as it will be when completed:—The principal front of the building is on Calumet Avenue, occupying 200 feet, and the average depth of the main building is 35 feet. On 26th Street, the frontage is 86 feet, which forms the south wing of the building. The north wing is formed by the old hospital, which has been greatly enlarged and remodeled throughout, to make it correspond with the other portions of the structure. There is a third wing immediately in the rear of the centre of the main building which extends back 86 feet, thus making the three wings of an equal size and depth.

The building is to be constructed in the Byzantine style of architecture, and will be three stories high, with a basement which is partly above the ground, and, therefore, might be considered another story, as it is nine feet in the clear. Beneath the whole is a deep cellar, and over all a large, roomy attic, which may be used in case of need for rooms. The front of the building is divided into five sections, two of which recede in order to give place to the towers which are placed at each of the corners. These towers have a canopy top, and as they will be used as ventilators, the whole building will be furnished with pure air in abundance.

In the centre of the building is the main entrance to the basement, which opens into a hall that leads back to the corridor. This corridor passes along the rear wall of the building,

on each of the three stories and basement. This a new method of constructing the interior of a hospital, it hitherto having been the plan to place the corridor in the centre of the building, with the rooms on either side opening into it. After a careful study of many plans, it is believed, however, that the present one is much more suitable for the purposes for which the building is being erected, as the air is thus allowed to circulate freely through the rooms from the front and rear. Thus a continuous circulation of pure air is secured, while the foul air escapes through the rear windows, instead of passing through the rooms on the opposite side of the corridor. By this plan of ventilation, infection from contagious disease is rendered almost impossible. As you enter the main hall in the basement, on one side is the visitors' room, while upon the other side, directly opposite, is the reception-room for patients. In the rear of these, on the south side of the main entrance, is a pleasant roomy dining-hall, 24 by 37 feet; back of this is the kitchen, 25 by 25½ feet, while still back of these rooms are the store-room and pantry, six cells for uncontrollable or quarrelsome patients, and a ward 28 feet wide by 38 feet long. On the north side, the whole of this floor is divided up into rooms, 15 by 20 feet, which are to be used by the patients who are sent to the hospital for treatment. The laundry department is also on this floor, in the centre wing, and is to be fitted up with every convenience, and provided with all the modern inventions for the washing, drying, and ironing of clothes.

There are three entrances, which lead up by three flights of steps to the main floor. As in the basement, the hall runs directly back to the corridor in the rear, while one side is a reception room for those who come to visit the institution; while on the opposite side is the room where the patients are to be examined. A large hall, 30 feet wide by 45 long, in which medical and other lectures are to be delivered, is on this floor, underneath the chapel. Seats are arranged in the hall that will comfortably accommodate 300 people. In the rear of the hall is an octagonal recess for the lecturer, and above is a large window, or skylight, that throws a flood of light down upon the

lecture-desk. The hall in front is finished with a row of cases, in which the medicines are to be kept.

The north wing of this main floor is used wholly for patients' rooms. Wards, 25 feet wide by 37 feet long, are situated north and south of the main hall, on the corridor. In the south wing there is likewise a large ward 25 by 80 feet, while between the corridor and the south wing is the nurses' room, 12 by 16 feet. Adjoining are water-closets, a large bath-room, which all the patients are allowed to use, a dumb waiter which carries the food up to all the floors, and all the other conveniences that are needed to care properly for the patients. The height of the ceiling on this floor is 18 feet, giving the room an airy, light appearance.

In the second story the halls and corridors are the same as those below, and the ceiling is 13 feet high. In the south wing of this floor a number of pleasant parlors, 21 feet long by 11 wide, are arranged, in which the convalescent patient may exercise and enjoy social intercourse. In addition to these is a ward 25 by 30 feet. There are likewise water-closets—one in each section of the building—and a bath-room. There are also two suits of rooms, into each of which passes the dumb waiter. The remainder of this floor is divided up into separate compartments, of the same size as these below, for the accommodation of the patients.

The ceiling on the third story is also 13 feet high, and the whole floor is laid out in about the same manner as the floor below, with the exception of the chapel. This is finished in a neat and tasteful style, being plain but convenient in its construction. A small gallery is erected in the front end of the chapel, while a large chancel, with all the accessory furniture, is situated in the rear. The seating capacity of this chapel is about 300, and is comfortable.

The building is covered by a large attic, which is both well ventilated and lighted, and may be used for various purposes, should the accommodations below at any time prove insufficient. In the large cellar underneath the building is placed the furnace, fuel-room, and all the necessary appliances for heating the

building, which is done by steam. Beside the steam apparatus, nearly all the rooms are furnished with grates for coal fires, to be used in cases of emergency.

In addition to all these conveniences, the hospital is provided with a large elevator, which runs from the basement to the upper story. This has been constructed so that patients may be removed from one part of the building to another, without removing them from their cots; the elevator having been made large enough to carry a full-sized cot. A spiral staircase surrounds the elevator and connects all the floors of the building. There is also, in addition to this and the main stairway, an additional one in each wing of the building. The hospital is finished throughout in pine, grained to resemble oak.

The roof has a steep pitch, and is covered with slate, with three pediments, one in front of each wing.

The building will cost, when completed, about $60,000.

Foreign Correspondence.

PARIS, *July 23d, 1869.*

The busy nine months of the medical year are drawing to an end, and the summer vacation approaches. One after another the lectures and clinics have ceased, the dreaded examinations been passed, and the students, taking a long breath for the first time in the year, scatter right and left, abandon Paris and flee to the country, the successful to repose upon their laurels, the plucked to console themselves for their defeat.

By a tacit concurrence in the fitness of things, the patients, the third party in the great triad of professors, students, and sick people, seem to have resolved to postpone their diseases until such time as they can furnish material for the fall lectures. Consumptives recover during the warm weather, the entire group of bronchitis, pneumonias, pleurisies, and emphysemas that throng the hospitals in winter, seem spell-bound by the gracious hand of summer, and so far no cholera has come to supply

their place. A lull has fallen upon the field of battle with disease and death, the enemy seems to have drawn off his forces a little, perhaps to recruit, and the soldiers may rest panting on their arms. The battle is so long, so deadly, and must so soon be renewed!

Nevertheless it is a lull, not a cessation of hostilities. Though the amphitheatres be deserted, and the voice of the clinicien be silent in the wards, the academy still holds its séances, and discusses a thousand and one medical subjects with zeal and ability, from which discussions result much entertainment and reputation for the physicians, and occasionally some advantage for the patients.

At the séance of the 9th of July, M. Gavarret read a report on a memoir by Dr. Javal, concerning astigmatism, or ametropia, as it was formerly called. This memoir describes a little apparatus invented for the qualitative and quantitative detection of the remediable form of the disease. The theory of it is based on the following considerations:—

In an eye normally constituted, the surfaces of separation of the different refrangent media are regular, and may be considered as surfaces of revolution around the concentric optic axes. Hence, the power of the natural dioptric apparatus is sensibly the same for all meridians. In other terms, the light, in its passage across the transparent media of a normal eye, obeys the same laws as when traversing an ordinary dioptric apparatus.

It frequently happens, however, that the curve of the surfaces of separation of the transparent media, varies from one meridian to another, so that these surfaces are no longer concentric. This vice of conformation, this asymmetry, occasions the functional difficulty known as astigmatism. An asymmetry in which the variation of the curve increases or diminishes gradually and constantly from one meridian to another, is called regular, and experience and calculation show that this defect may be corrected, and the functional consequences avoided, simply by correcting the asymmetry of the two principal meridians.

The asymmetry may affect at the same time the anterior face

of the cornea, and the two faces of the crystalline lens, but it is rare that the two faces of the cornea are involved coincidently with this latter lesion.

M. Javal's apparatus is designed both to detect this defect in the eye, and ascertain the glasses needed to compensate for it. The patient, with his two eyes widely-opened, looks through five-inch convex lenses at a card, upon which are traced two precisely similar dial-plates, which are separated from each other by exactly the same distance as the lenses, and placed exactly opposite the eyes. From the centre of the dial radii, indicating all the hours and half hours, are drawn to the circumference. The angle comprised between any two radii is, therefore, about fifteen degrees. The card is first placed in the focus of the lenses. The patient combines the two images into one; the axes of his eyes are then necessarily parallel. Then, by means of a metallic button, attached to the side of the apparatus, the card is removed as far away as possible from the patient, the images become confused, but remain combined. Then the card is gradually approached towards his eyes until such moment as he can say, "The radii on the dial are all confused and grayish except one; that I see clearly." This indicates, first, that the eye observed is astigmatic; second, the image of the objective card is in the focus of the principal meridian at the minimum curve; third, that the principal meridian at the maximum curve is in the plane of the ray seen clearly.

This ascertained, the oculist passes before the eye to be examined a series of cylindrical divergent lenses, of successively increasing power, from $\frac{1}{36}$ to $\frac{1}{3}$. This series contains twenty different combinations. The apparatus is so disposed that each lens in passing before the eye is in the plane of the principal meridian at the minimum curve, consequently it does not displace the focus of this meridian, while it pushes back the focus of the principal meridian at the maximum curve. When the patient says, "I see all the rays with equal distinctness," the focus of this meridian has been made to retreat sufficiently to coincide with the focus that has not been displaced, and the asymmetry

is corrected. The number of the required lens is, therefore, accurately ascertained.

A new method of detecting and measuring the diplopia in ataxia has also been suggested. It is well known that the reason that the two eyes are able to combine into one the double images that come to them from a given object is, that the rays from that object strike upon exactly similar portions of the two retinæ, which are both turned in the same direction. But if the parallelism of the optic axis be destroyed, it is evident that parallel rays will fall upon *dissimilar* regions of the retinæ, and, hence, a double impression will be retained by the brain. The relative position of these two images differs according to the nature of the strabismus. When that is divergent, and the left eye, for instance, is turned towards the left, the rays from an object, directly regarded by the right eye, and seen most distinctly by it, would fall to the right of the left retina, and hence the object would appear placed more to the right than in reality; in other words, its image, crossing that impinging upon the right eye, will be seen on the right side of it. In convergent strabismus, the rays would fall on the left of the left retina, but would pass on inside of those going to the right, and the two images would appear side by side. To make this effect more conspicuous, and, consequently, to detect the incipient degrees of the malady, at a moment when its detection would assist the diagnosis of the ataxia, spectacles have been suggested, of which the right glass should be colored red, and the left blue. The relative position of the colored images are then perceived clearly, at a glance.

The "*Union Medicale*" published the other day an article upon the utility of rhinoscopy and of the naso-pharyngeal douche, invented by Prof. Weber, which, combined, render great service in the diagnosis and treatment of such diseases of the ear as depend upon trouble in the pharynx and posterior nasal cavities, or Eustachian tubes. The rhinoscopic method, as you are aware, consists in placing, at the bottom of the throat, a small mirror, whose polished surface illuminated by a strong light is turned upwards and forwards. This surface, in its turn,

throws the light upon the parts to be examined, which are at the same time reflected in the mirror, and thus become visible to the eye of the observer.

Rhinoscopic examination plays an important part in the study of chronic, granular pharyngitis and its complications. In these cases, the physician frequently discovers, near the pavillion of the Eustachian tube, a swelling of the mucous membrane, and so abundant a proliferation of all its elements that the mouth of the tube is completely stopped up by mucosities, which prevent the entrance of air to the middle ear, and interfere with its catheterism. This obstacle can only be detected by the rhinoscopic mirror.

Granular pharyngitis is one of the most frequent chronic diseases of the throat, and is affirmed to be equally common as a complication in diseases of the ear. Sometimes the pavillion of the Eustachian tube is completely enwreathed with granulations. Where it becomes necessary to ascertain the degree of permeability of the tube, the physician may combine the use of the sound with auscultation. This is effected by means of a a tube, putting his ear in communication with that of the patient, when he can directly recognize if air be admitted behind the tympanum.

Weber's douche serves to wash out the nasal fossæ, the posterior nostrils, and the Eustachian tubes, and to inject medicated fluids upon them. It differs from the means hitherto employed, inasmuch as it enables the physician to pass a gentle and continuous current over the diseased parts. The instrument is furnished with an extremity exactly the size of the nostril into which it is inserted, so that the liquid cannot run backwards. This liquid, gently pushed by means of a syringe, fills the nasal cavity of one side, passes into the upper part of the pharynx, where it bathes the mouths of the Eustachian tubes, and, finally, runs out at the nostril of the other side. It will not go down the throat, for Weber has proved by experiment that when the nostrils are entirely closed the soft palate is raised and closes the bottom of the pharynx. It is to be supposed, therefore, that at the beginning of the operation, before

the liquid has reached the second nostril, this would need to be stopped up by something corresponding to the extremity of the instrument which occupies the first; but this is not specified in the "*Union Medicale.*"

While speaking of diseases of the pharynx, it would not be out of place to notice a remarkable case of pharyngeal tumor that occurred in the service of M. Richet, at the Hotel Dieu. This tumor was enormous, and developed at first in the soft palate, seemed to perfectly answer the description of tumors that are developed in this region, from a hypertrophy of its glandular elements. It was ulcerated, and rendered deglutition and even respiration extremely painful. M. Richet resolved to operate, but bethought him first of trying the effects of sublimate and iodide of potassium. This treatment was entirely successful; the tumor rapidly diminished in size, the ulceration healed, and, by this time, the patient is considered about well.

At the Imperial Society of Surgery, the other day, M. Broca presented a Peruvian skull, found by Squier in an old tomb of the Incas, in the valley of Yucay, near Cuzco, and belonging to a date anterior to the time of Cortez. The interest of the skull to surgeons lay in the fact that it had been trepanned! The perforation was situated on the left side of the frontal bone; and from the appearance of the surrounding osseous tissue, no doubt remained that the operation had been performed on a living person. M. Nelaton estimated that the patient should have survived the trepanning about eight days.

The bone presented no trace of fracture, and after examination of that part of the inner table which adjoined the perforation, the surgeons unanimously concluded that the operation had been undertaken on account of some internal lesion, an enterprise which indicates rather advanced notions in theoretical surgery. But the act did not come up to the theory, since it was evident from the appearance of the square opening, with straight and regular edges, that the surgeon had been provided with no instrument specially appropriate to the purpose, but had operated with some rude and ordinary chisel.

At the last séance of the Biological Society, M. Charcot read

a paper upon certain symptoms marking the début of cerebral hemorrhage. This distinguished physician declared, it was an error to suppose that the paralyzed side of the body is permanently colder than the other. The lowering of the temperature really occurs, but is but momentary, and a reaction speedily sets in, which raises the temperature of the paralyzed part. It is extremely remarkable that in respect to their cadaveric rigidity, the paralyzed muscles present almost the same characteristics as those observed in the muscles of persons who have been struck with lightning. That is to say, they enter with unusual promptitude upon this taste, which is, however, but slightly intense, and of short duration.

Now, Brown-Séquard has observed that in paralysis of the vaso-motor nerves, the vitality of the parts seemed to be exalted, electric excitability greater, and the cadaveric rigidity more tardy, more intense, and of longer duration. In these respects, therefore, a real antagonism seems to exist between the sympathetic and the cerebro-spinal nervous systems. But Charcot's other observations concerning the rise of temperature in paralyzed limbs seems rather to coincide with these remarks of Séquard's, and with Claude Bernard's experiments, by which section of the sympathetic nerve was followed by precisely similar effects.

A patient has just left the wards of M. Hérard, at Laribois-siere, who has excited much interest as the subject of that rather rare disease glosso-labial paralysis. The patient was a man about 50, of a robust constitution, large, strong built, though not fleshy, well nourished, in good health up to the time of the accidents in question. He entered the wards on the 20th of May, and gave the following account of himself:—Four or five days previous, on waking up in the night, he discovered that he had completely lost the power of speech. He declares that he experienced no unusual sensation; yet this seems scarcely probable, since, as he was alone, there seems no reason why he should have attempted to speak, and thus discovered his incapacity, unless prompted by some uneasiness, however vague. Much frightened, he contrived to summon assistance and send

for a physician; and the latter, who arrived the next morning, put a blister to the nape of his neck. In a day or two, the aphasia was diminished, and the patient could mumble out certain sounds; but as the concomitant symptoms to be immediately described still persisted, and the power of speech was in anything but a satisfactory condition, the patient, about the 5th day of the disease, entered the Hospital, where the following observation was made of his case:—

The intelligence, which seems to be naturally vivacious, is perfectly intact. There is not the slightest perversion of motility or sensibility in any of the limbs, and the patient suffers no pain, either in the head or in any other part of the body. No perversion of any of the special senses. The face, in repose, presents nothing of note, except that the left corner of the mouth falls a little, and the right is drawn. This difference persists during the act of laughing, but there is then no general deformity, as in facial hemiplegia. The sensibility of the entire face, of the lips, mouth, and tongue, is intact, as also the sense of taste.

When the patient attempts to speak, he uses most violent efforts, twisting first the lips, then the entire head, and often suddenly embracing the person he addresses, as if to convey by touch a meaning so imperfectly expressed by his tongue. There is no fibrillar trembling of the lips, as in progressive paralysis, and there is a great deal more sound and effort at articulation than in true aphasia. But the difficulty seems to lie in the closing and adjustment of the lips; hence, all sounds in which they are especially called into play, as the utterence of the sabialis, and most of the separate vowels, are quite impossible for the patient. He mumbles between his teeth and in his throat, and his difficult speech is affected with a curious precipitation and irregularity of rythm; he struggles desperately with a few words, then, as if the vocal apparatus had been forced into momentary working order, and he dreaded to lose the opportunity, he utters a number of words in rapid succession, and stops abruptly. It is precisely as if the voice slid rapidly down hill and came to a sudden bump at the end!

The difficulty of articulation is increased by the coincident paralysis of the tongue, over which the patient has almost completely lost control, and is scarcely able to move it in any direction, especially towards the right. There is no deviation.

Besides the tongue and the orbicularis, the buccinator muscles of both sides are partially paralyzed. The patient is utterly unable to distend them in the actions of whistling, smoking, or blowing upon a trumpet. A more serious consequence of this paralysis is, that the food is with difficulty retained in place during mastication, but falls in front of the gums, from whence the patient is obliged to extract it with his fingers, and push it back towards the pharynx.

The uvula and soft palate are unaffected, and hence there is no change in the timbre of the voice, which usually becomes nasal in case of their paralysis. Deglution is facile after mastication is once accomplished.

Such is the assemblage of symptoms presented by the patient, and it is evident at a glance, how difficult it is to explain them. The nerves principally involved are, of course, the hypoglossals and the buccinator and orbicular branches of both the facials, with a preponderance towards the left. Hence, the lesion has not spread according to contiguity of the nervous roots, but according to the connection of nerve functions, which of itself is a remarkable circumstance. The nature of the lesion is most difficult to determine, or even suspect, especially for the case in question, which was anomalous for the suddenness with which the accidents were produced. In the other cases that have been reported, especially by Trousseau, and more recently by M. Alfred Fournier, the disease has always invaded the parts with most insidious slowness; and the few autopsies that have been made have generally revealed a scleriasis or atrophy of the roots of the hypoglossal nerves, frequently extending to the glosso-pharyngial, and even involving the pneumo-gastric. In these cases, however, the soft palate and uvula were always paralyzed. But, with Hérard's patient, the paralysis was produced as suddenly as that consecutive to a cerebral hemorrhage; and the rapidity with which, at the beginning, an improvement took

place (improvement followed, as we shall presently see, by a perfectly stationary condition) is also precisely such as occurs when the fluid portion of the effusion is quickly absorbed, and the fibrinous coagulum left for a slower process. But it is almost certain that the most limited effusion at the root of any of the nerves affected—that is to say, in the fourth ventricle, or in the medulla oblongata—would have been followed by instant death. Moreover, in so narrow a space, several other nerves could hardly fail to be affected, which were evidently untouched —the glosso-pharyngial, pneumo-gastric, and spinal accessory. Finally the facial nerve was not paralyzed throughout all its extent, but merely in the regions indicated above. The play of the nostrils was quite free. It seems most probable, therefore, that if any hemorrhage is to be blamed, it must have occurred in the brain, in some part destined to preside over articulation, and to that extent would be allied to aphasia, and M. Brœa's third, left convolution of the hemispheres. But, as we have already seen, the character of the tortured and twisted articulation differed much from the almost absolute muteness of aphasia. Moreover, in that disease there is no deviation of the mouth, or paralysis of the tongue or buccinator.

The prognosis of this disease is as curious, I may say as unexpected, as its diagnosis. It is, according to Trousseau and to Fournier, *almost invariably fatal.* Fournier has analyzed the proximate causes of death, and shown that they all depend on the difficulties in deglutition. In Herard's patient, these difficulties were comparatively slight, though productive of sufficient inconvenience. But when, in addition to the paralysis of the buccinators, the reflex action of the tongue is destroyed, so that it cannot arch against the palatine vault and at once propel the alimentary bolus towards the pharynx and shut off its reflux towards the orifice; when the soft palate no longer rises to close the nasal cavities, and the uvula no longer directs the closure of the epiglottis, then the food falls out of the mouth, into the larynx, into the nose, thus producing the most violent strangulation; it frequently causes ulcerations from long sojourn in the buccal cavity, and so insufficient a quantity is swallowed that the patient actually starves to death.

With the patient at Lariboissiere, the affair turned out differently. Scarified cups were applied to the neck on the first day, the second, a blister, the third, a purgative clyster was administered. After that, a blister was kept in permanence at the nape of the neck, for two or three weeks. For the first week, the improvement in his condition that had already begun before his entrance continued. By the 27th, the patient could speak so as to be understood, though with difficulty. He no longer embraced the persons he addressed. He could also smoke his pipe, but could not whistle. The food no longer fell in front of the gums. He could easily turn the tongue to the left, but not at all to the right, and only with difficulty upwards. The effort deformed the right labial commissure. The general health continued perfectly good. At this point, the patient remained perfectly stationary till the 20th of June. About this time he began to be treated with sulphur baths, three times a week, and electricity every day, the current being directed to the nape of the neck and the muscles of the mouth. After this, he could talk much longer at a time, although the difficult articulation continued. The patient left the Hospital the 25th of July, in that same state.

Leaving further comments on this case to persons of greater sagacity than myself, I must find space to mention a patient in the wards of M. Bouilland, at La Charité, who is in the seventh year of a remarkable muscular atrophy, affecting the trunk and limbs. I was fortunate enough to be present in the ward one day during a visit made by M. Duchenne (who is quite famous in connection with this disease, as well as the *ataxic locomotrice* that bears his name), who exhibited and explained the case, and applied it to the demonstration of certain theories of his own. I will mention two of them.

In the first place, it is to be noticed that the scapular muscles are the only ones that are not wasted almost to nothing, and in complete fatty degeneration. The deltoid is a mass of fat. But, nevertheless, the patient is still able to raise his arm to a level with the shoulder; and when M. Duchenne supplied the place of the atrophied grand serratus, by forcible pressure

upon the shoulder-blade, so as to fix it against the ribs, the patient could even place his hand on the top of his head, "which proves," observed M. Duchenne, "that the supra-spinous muscle, which alone is left to effect this action, is far more powerful than generally supposed, and in spite of the nearness of its insertion to the articulation, and can of itself supplement the deltoid."

But the most remarkable phenomena are those connected with the respiration. The intercostal muscles are almost gone (their place being supplied by fat), and the shape of the chest entirely changed. The antero-posterior diameter is much shortened, and the transversal lengthened, so that the chest is notably flattened and broadened, and resembled, by actual measurement, the following figure:—The inferior extremity of the sternum is directed backwards. The scaleni, serrati, pectoral, and other muscles devoted to the elevation of the ribs being atrophied, these do not rise during inspiration: the chest remains perfectly motionless, and the breathing is effected entirely by means of the diaphragm. As the abdominal muscles are completely flaccid, they offer no resistance to the descent of the diaphragm, or the projection of the abdominal viscera, and a prodigious eventration occurs at each inspiration. If the hand be forcibly laid upon the abdomen, so as to resist the projection of the viscera, the force of the diaphragm is expended on the false ribs, which are *drawn inwards;* exactly the contrary to what occurs in normal adult inspiration. Beau and Massiat have, however, observed this phenomenon in children, when their breathing is violent or agitated.

From the transformation in the shape of the thorax, M. Duchenne drew the following inference:—"Since the cavity was diminished coincidently with an atrophy of the intercostal muscles, it follows that the office of these muscles is not to diminish the capacity of the chest, since that diminution is effected at a moment when they are impotent; and since the cavity is diminished in expiration, it follows that these are not expiratory muscles, as maintained by Beau and Massiat, but perpetual antagonists of the expiratory force, which triumphs the instant

they are *hors de combat;* in other words, that the intercostals are muscles of inspiration.

But, in the humble opinion of your correspondent, M. Duchenne does not prove his case, at least with these facts; but his own words turn against him. For, supposing that the intercostals be really "the constant antagonists of the expiratory force," this implies that they act continually, and not intermittently, as they must do, if called upon simply to contract during inspiration. Not their *contraction* but their *tonicity* is required to counterbalance the elasticity of the chest, which is, like the lungs, in a state of forced extention, and continually tends to fold upon itself, bending at the angles of the ribs. When this tonicity is destroyed, the chest collapses, as proved by the remarkable case in question, and; hence, it is true that such collapse is due to the atrophy of the intercostal muscles, but not for the reason assigned by M. Duchenne.

In surgery, I have only to report this week, as belonging to my personal observation, an operation performed by Professor Jarjavay, at Beaujon. It was the excision of a fibrous tumor, developed in the abdominal parietis of a woman, of good constitution, about 35 years old. The tumor was broad and rather flat, about the size of the palm of the patient's hand, and had existed for two years without causing much uneasiness. But, latterly, it had begun to increase, and as it was evidently extra peritonial, and apparently attached to the crest of the iliac bone, the Professor resolved to operate, expecting either to be able to ennucleate the tumor, or to find it sufficiently pediculated, to render its excision facile. In both hopes he was disappointed. The tumor was firmly attached by a broad base to the peritoneum itself; and the surgeon having ennucleated it to this point, removed the bulk of the mass in successive slices, leaving, however, one slice adherent to the peritoneum, which, therefore, was uninjured. The patient is doing well.

The *Bulletin de Therapeutique* reports a case of successful treatment of acute mania by digitalis. A boy of 14 was received at the Hotel Dieu, in the service of M. Vernois, in a condition of extremely incoherent delirium, and with all his

limbs affected with disordered movements, very much like those of chorea. The diagnosis between a veritable mania, with extreme agitation, or a chorea accompanied by delirium, remained doubtful. On his entrance, the patient had been put into a strait-jacket; but M. Isambert coming to supply the place of M. Vernois ordered the strait-jacket to be taken off, and 30 drops of tinctue of digitalis administered every day. From the commencement of this treatment, the vociferations and disordered movements ceased, and there remained a low, muttering delirium. Inquiry into the boy's antecedents then disclosed the fact, that for the last year he had been in a condition of real lypemania, of which the mania was an acute crisis. It, therefore, became unquestionable that digitalis had been able to exercise a valuable influence in calming acute mania.

Dr. Savignac inserts two formulæ in the *Bulletin*. The first is directed against cholera:—

Ether, 64 grains (4 grms.)
Ext. Rhat., 64 grains (4 grms.)
Syrup opii, 480 grains (30 grms.)
Aqu. Menth., } āā 960 grains (60 grms.)
Aqu. Mellis, }

Mix the aqu. menth. and aqu. mel. together; dissolve in them the ext. rhat.; add the syrup opii, and, finally, the ether. A desert spoonful every quarter of an hour, until the severity of the symptoms are abated, then, it may be given at longer intervals.

The second formula is for dysmenorrhœa:—

Acet. Ammon., 80 grains (5 grms.)
Aq. Orang. Flor., } 640 grains (40 grms.)
Aq. Mel., } 1280 grains (80 grms.)
Syrup Saffron, 480 grains (30 grms.)

Dose: a desert spoonful. In very severe cases, add 15–20 drops of Sydenham's laudanum.

Proceedings of Societies.

CHICAGO MEDICAL SOCIETY.

Friday Evening, July 23, 1869.

The regular semi-monthly meeting of this Society was called to order, President Bogue in the Chair.

The Secretary read the minutes of the last meeting, which were approved and ordered to be placed on file.

The next order of business was the proposals for membership.

The name of Dr. F. W. Calkins was proposed by Drs. Quales and Parks.

Dr. Quales then proceeded to read his report on the Sanitary Condition of the North Division for the quarter ending June 30, 1869. The Doctor gave a detailed account of the meteorological observations he had taken, and said that from the unusual amount of rain during May and June, and the consequent dampness of the atmosphere, it would be natural to infer that they had a deleterious influence upon the sanitary condition in general, and more especially in such localities where the drainage is insufficient. This was confirmed by practical observation. He stated that it had been his experience under these circumstances that diarrhœa, dysentery, etc., especially among children, manifested themselves earlier, and in a more malignant form. This had been the case during the two preceding years. Fevers, especially intermittent, remittent, and typho-malarial, also rheumatic and neuralgic diseases. Of contagious diseases, there had been 40 cases of small-pox, only 2 of which proved fatal, which was evidence it was of a mild type; measles, 117 cases, 92 occurring among emigrants.

The report of Dr. Quales, upon motion, was accepted and ordered to be placed on file.

Dr. Reid remarked that he had met with quite a number of cases of variola, all of which were quite mild; also a number of cases of measles and scarlatina, and within the past two weeks a considerable number of cases of infantile diarrhœa had been met with. Upon being asked what treatment he generally pur-

sued in the latter disease, the Doctor said he usually made the following prescription:—

℞. Calomel.....gr. ij.
Morph. sulph.....gr. $\frac{1}{10}$—$\frac{1}{12}$
Sugar.....gr. xij.

Ft. chart No. xij. One powder to be given every two or three hours, according to circumstances. Also sometimes employed hydr. cum creta, sub. nit. bismuth and rub. villosus.

Reported one case of a woman who had profuse rice water discharges, and had Asiatic cholera been prevalent, should have decided to be such, but under the circumstances could call it nothing but a sporadic case.

Dr. Marguerat remarked that he had seen large doses of brandy prove beneficial in the treatment of cholera infantum; also pepsin, in ½ gr. doses every two hours. Thinks the practitioner should not trust the nurse to administer morphine to children.

Dr. Fitch says he has been in the habit of using morphine in doses ranging from $\frac{1}{60}$ to $\frac{1}{120}$ gr. in the treatment of cholera infantum, for a number of years, but always weighs it and puts it up himself when for children. He stated that the last case but one he had prescribed for that evening, was one of cholera infantum. Gave morphine, gr. $\frac{1}{100}$; bismuth and sugar, each, gr. ij. at a dose. The child was teething, and he scarified the gums, which, he says, he invariably does under such circumstances. Also applied a sinapism to epigastrium sufficiently long at a time to keep up a redness. Always advises giving the powder dry on the tongue, and as little water as possible. If the milk curdles on the child's stomach, he usually substitutes arrow-root, or something of the kind.

Dr. Paoli wished to know if opium is a proper remedy to be generally employed in the treatment of cholera infantum. He is of the opinion that we do little in giving this drug to assist nature in assimilating the food. He thinks, however, that there are a few cases where it may be beneficially employed, withdrawing the medicine when the secretions become diminished. The Doctor says he usually gives a little calomel combined with

the opium, and applies cold water to the head. He does not think there is much nutriment in arrowroot, and always prefers the mother's milk. The tonic treatment, such as columbo and cascarilla, together with sits baths, and warm flannel clothing to keep up the bodily secretion, is the treatment most usually employed by him.

Dr. Fitch thinks that Dr. Paoli does not discriminate between cholera infantum and diarrhœa. There is hyperœmia in these cases in the intestines and not in the brain, and in cases where nothirg can be retained on the stomach the effect of the morphine is to stimulate the brain.

Dr. Paoli says he has never had any success in the treatment of cholera infantum by morphine.

Dr. Parks reported the successful treatment of a case of cholera infantum by the use of pepsin, where there was no digestion.

Dr. Wanzer also reported several cases successfully treated by pepsin combined with $\frac{1}{32}$ of gr. of morphia. The kind employed was Houghton's pepsin, in 2 gr. doses.

Dr. Macdonald has employed the following treatment of cholera infantum, with success:—

℞. Pulverized Charcoal----------gr. j.
Sub. Nit. Bismuth----------gr. ij.

One powder to be given every two hours; also applied flannel over the bowels.

Dr. Quales says he has seen four cases of cholera infantum, one of which died. He used the pepsin, but is not very favorably impressed with its efficacy.

Dr. Wanzer says when the milk cannot be retained on the child's stomach, he usually gives calomel, gr. $\frac{1}{8}$, with a grain of sugar. Whatever medicine he gives he uses as little water as possible. Port wine and ice has been employed with benefit by him.

Dr. Bogue says he has given the sulphate of morphine in the treatment of cholera infantum, in doses varying from the $\frac{1}{60}$ to the $\frac{1}{100}$ of a grain, for several years, with decided satisfaction.

Dr. Avery says he is in the habit of giving hydr. cum creta,

gr. ij.; camph. Doveri, gr. ij., three times a day, sometimes employing an emulsion consisting of—

℞. Al. Ricini----------℥ vj.
Tinct. Opii----------gtt. xvij.
Gum Aracia, Sach. Alba āā----------℥ ij.
Aquæ q. s.----------℥ iv.

M. Sig. To be given in teaspoonful doses, pro re nata.

Dr. Fitch is of the opinion that hydrarg. cum creta produces vomiting, and gives calomel combined with bismuth, or creta preparata instead.

The Society then proceeded to miscellaneous business. Subject for discussion at next regular meeting, "The Pathology and Treatment of Chlorosis."

Society adjourned.

PREVENTION AND TREATMENT OF THE DIARRHŒAL DISEASES OF INFANTS.

REMARKS MADE BEFORE THE OBSTETRICAL SECTION OF THE NEW YORK ACADEMY OF MEDICINE, MAY 17TH, 1869.

By STEPHEN ROGERS, M.D., New York.

Mr. Chairman:—As a text for the few following remarks, I present a sentence from the address of Sir Thomas Watson, on the occasion of his retiring from the presidency of the Clinical Society of London, because it expresses accurately my own sentiments in reference to the subject before us, and, no doubt, those of many of the Fellows also. "What I deprecate," says Dr. Watson, "what I would fain see altered, what it is one great end of this Society to do away with, is the vagueness of aim, the uncertainty of result, the merely tentative nature of too many of our prescriptions."

In no department of medicine is vagueness of aim, uncertainty of result, and consequently tentative practice, more conspicuous, and, I may add, more disastrous, than in diseases of infants, and especially diarrhœal diseases. We lose our aim, first, by forgetting, or by never knowing, the anatomy and physiology of the infant; and we are forthwith environed by complications and inexplicable phenomena which befog every effort we make.

The digestive apparatus of the infant is, in some respects, like that of the carnivorous animals, arranged for highly animalized and easily assimilable food. This alone should teach us that the pharinaceous and vegetable substances should not enter the diet of young infants. Infants, like animals and like adults, require water; and while their proper food, milk, contains all the water usually demanded, any accident or disease which cuts off the accustomed supply of milk, as well as any circumstance which greatly increases perspiration, such as warm weather, is certain to induce thirst, for which water is the true remedy. The infant intestines, like the adult, are provided with a reservoir for the reception, detention, and absorption of the assimilable fluids. This organ is the *large* intestine, or *colon and cæcum* and the rectum included, and has not like the stomach, and a considerable part of the small intestine, any digestive function. No part of it, therefore, can perform digestion, from the anus to the caput coli—it can only absorb; and substances which are simply in suspension, not in solution, are not appropriated when introduced into this portion of the intestine. Substances, in short, which are not transmitted through membranes by osmosis, are not utilized by the rectum or colon. As an absorbing organ, however, the large intestine is very active. There can be no doubt, I think, that the digestive portions of the intestinal tube of the infant, as well as the absorbing portions, are liable to the same diseases that affect them in the adult; and as diarrhœa is one of the results of disease in both portions, in both adults and infants, we will make our classification upon this understanding. Commencing with the stomach, I will say that diarrhœa *from indigestion* is, perhaps, quite as frequent, if not much more so, in infancy as in adult age. It is very liable to occur in warm weather, to infants both breast and bottle-fed, on account of their taking more milk than the stomach can dispose of, and more than the system requires, the child taking it for thirst instead of for hunger. It is also liable to occur in children bottle-fed on milk too much diluted; the digestive action of the gastric fluids suffering embarrassment by the very great amount of fluid, to say nothing of the grave derangements of the digestive organs, which are produced by insufficiency of nutritive material given in such habitually dilute food. The slow starvation produced by insufficient diet, and by diet which, though sufficient as to quantity, is unsuited as to quality, has many symptoms in common with much of the fatal infantine diarrhœa. This diarrhœa of indigestion is usually ushered in by more or less sudden anorexia, vomiting, thirst,

nervous disturbance, and heat of skin, followed in a few hours by diarrhœal discharges, containing more or less undigested food. Unless the cause is repeated, the attack generally subsides with the expulsion of the offending material. It is therefore an exceedingly easy disorder to treat in both the young and old. The treatment, as a rule, need be nothing else than *physiological* and *physical* rest. This is attained by withholding food—a practice readily followed, for the patient does not desire food—quieting thirst by cold water without stint or measure,* keeping the patient still, and, finally, when desire for food may return, to allow it in moderate amounts, and, if it be milk, *undiluted.*

In bottle-fed babies, whose milk has been diluted in the usual manner, from one-half to three-fourths water, nothing can be more striking than the change to undiluted milkman's milk, except, perhaps, when the dilution has been with barley, or other farinaceous decoction. Of all the compounds fruitful of infantile diarrhœa, in our city especially, those by farinaceous decoctions with milk rank first.

Children over six months often desire, and are benefited apparently, by farinaceous food occasionally; but the child should be allowed its choice to take it or not. This cannot be done by mixing it with its milk. All such articles should be given by themselves. The observation of these few plain rules for the treatment of the diarrhœa of indigestion, will be quite sufficient for most cases, medicinal aid being generally unnecessary. To avoid these attacks of diarrhœa of indigestion during our summers, every mother or nurse should be instructed to offer cold water to the infant, whether breast or bottle-fed, before offering it its food, for by so doing, the infant has the opportunity to quench its thirst with water, preserving the unembarrassed energies of the stomach for the digestion of the food.†

* I am ready to stake my reputation as an observer, student of nature, and practitioner, upon the declaration that there is no support in physiology, nor in pathology, nor in practice, for the popular and extensive professional idea that water, to satisfy thirst, can do any infant harm. The idea that it distends the stomach, that it weakens the organ, and prevents digestion, no matter when given, is all clap-trap, without a shadow of foundation in truth. This is a very mild term to use relating to these fostered ideas, if we take into account the untold misery, and even mortality, they annually produce in the diseases of the prima via of infants.

† Much favorable testimony has been furnished the profession, relating to the employment of pepsin in the diarrhœa of indigestion of children and infants. I have not met with cases in which a resort to this agent became necessary, and can therefore offer no experience with it. But as the principle upon which its use is based has a well-known physiological foundation, I am decidedly disposed to adopt it in cases which are not promptly controlled by proper physiological feeding.

Following the intestinal disturbance produced by an attack of diarrhœa of indigestion, the annexed train of symptoms are very often met with:—

Frequent alvine dejections of greenish, very fluid, and fœtid character, frequently containing portions of undigested casein coagulum—if its diet include milk—irritable stomach, and variable appetite, and almost continual thirst. Its discharges may be yellowish, fœtid, and watery, when voided, but become green after a little exposure, generally containing mucus; and there is usually some tenesmus. The child does not have very marked fever, except at varying intervals; emaciation progresses more or less rapidly, and the tongue, as well as the anus, indicate by their redness, enlarged papillæ, and excoriation, a profound disturbance of the alimentary canal.

The case is one of chronic *colitis, the usual diarrhœa of infancy.* The colon, as a receiving and absorbing cavity for the excrementitious and alimentary matter poured into it by the small intestine, and by its own excretory glands, refuses to perform its functions; consequently, as fast as material is lodged in it from above, it is hurried on through to the rectum and discharged, not only adding to its own irritability, but not permitting the absorption of much of the alimentary matter provided for it in the canal higher up. During the transit of a fresh supply of such material through the diseased colon, the child often has an intense febrile heat of skin, and not unfrequently convulsions, which terminate life. Both the fact that the morbid changes found after death from diarrhœa in infancy are chiefly in the large intestine, and the phenomena of the disease show conclusively that it is a *colitis* almost exclusively.

When we add to these evidences the results of the *treatment* of colitis, I see no room for a doubt that the usual diarrhœa of infancy, of which so many children die among us annually, is simply colitis. The treatment is clearly to avoid the causes which set up this inflammation, and to lessen the already existing inflammation and irritability. This is accomplished by withholding food as much as possible, keeping the desire for drink satisfied with water, and thus securing physiological rest for the colon. This rest may be more completely effected by calming its pain and irritability by means of anodynes thrown over part of its surface, *viz.:* the rectum. But in this use of anodynes we should never forget that neither the rectum, nor any other part of the large intestine, can digest; that its function is to absorb, and, therefore, nothing should be introduced into it, except solutions, or substances easily soluble in water, and therefore in the

moisture of the mucous membrane. Nothing but evil can come from introducing the time-honored *starch*, *gum-water*, *mucilage* of various kinds, oil, albumen, etc., into a diseased and irritable colon or rectum. The watery portions of these preparations are alone absorbed, if retained long enough, and the solid residue is left behind, doing much more harm than good, and often more harm than the combined anodyne does good. The idea that in some forms of inflammatory disease of the large intestine, its usual lubricating covering of mucus is absent, and any of the gummy or mucilaginous substances may in such case be introduced with advantage as a simple protection of the denuded tissue of the mucous membrane, is, to my mind, totally destitute of the support, not only of demonstration, but of probability; and so far as my individual experience may permit me to judge, has not practical support either. Poultices applied to the mucous membrane of the rectum, no matter of what bland substance they be composed, are foreign and excrementitious, and give no rest to the bowel.

Alcoholic solutions, unless largly diluted with water, are liable to irritate, and therefore objectionable. Watery solutions, which leave no solid residum, are clearly the most preferable, and of all preparations, the morphine salts in solution I think best. Where there is not very great irritability of the rectum, the much-used cocoa-butter suppository is a convenient and useful form of introducing the morphine, or other very soluble substances. The warmth of the bowel slowly melts down the mass, allowing the salt to come in contact with the bowel whose moisture dissolves it, and it is then absorbed, while the butter remains as excrement. But the simple watery solution of sulphate of morphine is the least irritating as well as the most active form of anodyne enema. Its dose by the rectum when thus introduced is rather less than by the mouth, and its action is more prompt and more effective to relieve tenesmus and irritability of the large bowel. I have often seen a single injection prevent all movement of the bowels for ten to twelve hours, in cases where the movements before it were almost incessant. Many adjuncts to this treatment will suggest themselves to any educated physician, and I therefore need not mention them here. I will add, however, that I rarely employ any other medication for the diarrhœa of infancy of this degree; and, so far as my observation enables me to judge, much of the favorable results claimed by our practitioners for their favorite prescriptions, such as minute doses of calomel, Dover's powder, ipecac, the sulphite salts, the bromine salts, and the various astringents, alkalies, and ano-

dynes and disinfectants, is due to the concident modification of the diet and care of the child. A diarrhœa, like that just described, of no great severity, having existed for some days, perhaps, suddenly suffers a great increase in the frequency of the movements of the bowels, nausea and vomiting come on, the skin becomes hot, the thirst is urgent, there is more or less extreme restlessness and actual or threatened convulsions. The dejections are, if possible, still more fœtid, watery, and of various colors from black to yellow; they are often streaked or dotted with blood, and the fluid portions sometimes stain reddish the clothes upon which they fall; there is sooner or later mucus intermingled with them, the tenesmus becomes tormenting, the anus red excoriated, and the tumefied mucous membrane of the rectum shows a tendency to descend. This has now become *acute colitis*, *inflammatory diarrhœa* of some authors, or *dysentery* of others. Its treatment does not differ from that already mentioned for colitis, except that it must be conducted with greater energy and watchfulness.

Withhold food as strictly as possible, give cold water *ad libitum*, arrest the pain and irritability of colon by morphine injections, and keep the patient as quiet and cool as practicable, for this is a disease of hot weather.

The use of pure cold water in the irritable stomach of infantile diarrhœa, is theoretically opposed by many practitioners, on the ground that it keeps up the vomiting, as they allege, and furnishes indefinite quantities of fluid to protract the diarrhœal discharges. Practically, I have never seen this theory supported, unless the water were combined with some alimentary substance. It is surprising, however, to see how little milk, or arrowroot, or barley, or any similar substance combined with water, will keep the vomiting and diarrhœa going on to a fatal issue. Pure cold water, on the contrary, will soon arrest vomiting, will give physiological rest to the stomach and intestines, will furnish the much needed fluid to the blood, and thereby calm nervous agitation and afford physical rest and restoration.

As to the treatment of the prolapsus of the mucous membrane of the rectum which we occasionally see follow one of these attacks of colitis, I will add that I have found nothiug of any service which does not arrest the irritability of the part, and the frequent movements of the bowels which attend it. Any agent which secures prolonged repose of the colon and rectum, will cure this condition. The most certain means which I have employed is an injection of the solution of morphine, thrown up immediately after reducing the prolapsed membrane by a cold-

water compress and putting the patient to bed. The bowels do not move for twelve to forty eight hours, and recovery of tone and natural condition progresses rapidly. A single application of this kind is generally sufficient, and I have seen very few resist more than two or three. There is still another form of most fatal diarrhœal disease of infancy, presenting the following train of symptons: A mild form of diarrhœa having generally existed for a few days, there suddenly come on vomiting and purging of a copious watery substance, at first containing feculent material, but subsequently an almost pure, opalescent, and nearly odorless fluid, without apparent pain or tenesmus. There is total loss of appetite, great thirst, the surface of the body rapidly becomes cold, the skin shrivelled and moist; in short, a more or less rapid collapse ensues which, as a rule, terminates in fatal convulsions, or anæmic coma, and does so generally within twenty-four hours after the attack. This is the form of diarrhœa, and the only form, in my opinion, to which we should apply the name *Cholera infantum*, and when compared with all the cases of diarrhœal diseases we see, I think the Fellows of the Academy will agree with me in saying, that it composes a small minority of them.

I have no suggestions for its treatment that would not occur to the mind of any physician.

Unquestionably the wisest plan in this, as well as in all the diarrhœal diseases of infancy, is to prevent them if possible. This we may do much to achieve by management of the food. While there is too much evidence to permit us to doubt that, if not a *cause*, dentition at least *attends* a period of development of the digestive apparatus of the infant, during which it is liable to diarrhœal disease, we cannot close our eyes to the fact that very large numbers of our infants die before dentition or any such development commences, before six months, and die of diarrhœal disease. Any extended remarks upon the subject of the diet of infants here I deem uncalled for, and I therefore shall say but little. We, however, all accept the proposition as self-evident, that the best food for the infant is good breast-milk. We are all quite as thoroughly convinced that this is very often not obtainable. Now comes the question as to what is the best substitute for breast-milk. That the milk of some animal should compose the basis of the substitute all, with few insane exceptions, agree. Great numbers of modifications of the milk of the cow—the only available one in this part of the world—have been advocated, chiefly in the degree of its dilution, and the addition of various farinacious substances. But my observations

have most thoroughly convinced me that the theoretical dilution of cow's milk, with the view of rendering it similar to the milk of the human female, is an unscientific delusion. It is founded, in the first place, upon the false premises, that our Croton, or other water, is a similar fluid to the watery portions of human milk. Its till further supports itself upon the unfounded assumption, that diluted milk of the cow is more easily digested than the original fluid, on account of the excessive proportion of casein.

There is no means of demonstrating the theory that the addition of water to the milk of the cow renders it more digestible in the infant stomach. But, on the contrary, any one can demonstrate almost any day during our summers, that the labor of the infant's stomach is much easier in the digestion of the best milkman's milk we can obtain here, than it is in the digestion of the usual dilute form, and still less than when diluted with farinacious decoctions. Providence has wisely arranged this matter so that if the milk—the food intended for the infant—be variable as to its constituents, the stomach has the power to digest and more or less completely appropriate them. Hence the milk of the human female, which is often richer in all of its constitutents than many samples of the milk of the cow, is digested, and the child flourishes; and on the contrary, the milk of the cow, which posesses many per cent. more of oil and casein than the average human milk, is easily digested, and the child thrives satisfactorily. The essential points in the whole matter being that the milk given contain nutrient material within a reasonable bulk, sufficient for the nutrition of the child, and that it be given soon enough after leaving the breast or udder to be sweet and good. I avail myself of this opportunity, as I uniformly do of any which presents itself, to denounce the doctrine of dilute cow's milk as infant food, as one destitute of reason and extremely dangerous. If this be true of milk simply diluted, what must be the state of the case when diluted with vegetable and farinaceous substances? For about ten years of my professional life, I have watched this subject closely, having had several children of my own to raise on the milk of the cow. I have yet seen no reason for diluting the milk sold in this city, to make it fit food for the infant at any age. On the contrary, I have often found a necessity for richer milk than could well be obtained here. My experience has satisfied me, that a great part of the difficulty and danger attending the raising of children by hand, as it is called, proceeds from this tinkering of the milk used. I regard the raising of a child with a tolerably good organization

as about as easy on the milk of the cow as on the breast. The essential points for the mother or nurse to observe are, that the milk be sweet, that is to say, not soured, that it be warmed to about 100°, that it be taken from the bottle through finely perforated nipples, that the bottle and nipple be kept clean, and finally, *that the child have all it will take.* And here I would repeat the precaution before alluded to, not to give the child milk during the very warm weather of our summers, till water has first been offered to it, else it will often take milk in inordinate quantities simply because it is thirsty, and will thus be overfed and injured. Children at the breast are often injured by this neglect. To those who may possibly regard these views of infant feeding as radical and perhaps dangerous I feel bound to say that I am supported by unquestionably competent authority. While writing these pages, I had the exteme gratification of receiving the pamphlet paper on "Food for Infants," lately read before the Medical Society of the State of Pennsylvania, by Dr. Hiram Corson, of that State. The Dr. has extended his observations through more than thirty years, and they have obviously been well and carefully conducted. He says, "I feel quite certain that it is almost as easy to raise children by hand, if they have an abundant supply of good undiluted cow's milk, as it is by the breast." And he repeats this expression of belief, adding, with great propriety and force—as his observations are conducted in the country and villages where good milk is easily obtainable—"if, then, in the country, where the milk is good, the child should have all it will take undiluted, how very important that no water should be added to the milk brought to cities by milkmen. It is not too much to say that before it reaches the citizen's door it is only two-thirds milk." He details the symptoms he has often seen presented by infants fed, but only half nourished, on dilute milk, and those descriptions accurately apply to great numbers of the diarrhœal disease we see here. His experience leads him to conclude that thousands of infants who die annually of these diseases, really "die from want of food." "They are starved to death," says he, speaking to the profession, "and we are not blameless." Again he says: "Little children not only need plenty of good food, but, even those who are fed at a full breast, also need occasionally a little cool water as drink."

This sentiment I am delighted to see as thus generally stated, but in the warm weather of our summers it is especially applicable. Dr. Corson very justly wonders that these facts have not more generally impressed themselves upon physicians, and

that as a consequence the public teachers with few exceptions, and the text-book of to-day, are promulgating the same doctrine and giving the same rules that they have for the last hundred years, changing, if at all, for the worse, for higher dilutions, and in the face of the frightful fact that infant mortality is increasing rather than diminishing. He very properly suggests that we try a change, which can hardly be for the worse. This is very grateful support to the sentiments I uttered many months ago, in the pages of the *Record* of Oct. 1st, 1868, p. 341. With this care to properly feed infants, much, very much, can be done to prevent their diarrhœal diseases, especially diarrhœas from indigestion; and with these simple measures for the treatment of chronic and acute colitis, vastly better results, I am convinced, may be obtained. The comparative experience of many physicians, male and female, in the city and in the country, confirms me in this belief, which I formed from an extensive public practice, added to that on my own family, and in private. —*N. Y. Med. Record.*

Book Notices.

Circular No. 2, War Department of Surgeon General's Office. Report on Excisions of the Head of the Femur for Gun Shot Injury. Washington: Government Printing Office. 1869.

This is a report of so much of the Surgical History of the late war as relates to Excisions of the Head of the Femur, for Gun Shot Injuries. It is prefaced with a historical review of this operation, and throughout beautifully illustrated. In the qualities of paper, type, and illustration, it certainly does credit to the Department. We have not had time to examine its contents, but have no doubt of their great value, especially to every practical Surgeon.

A Treatise on Diseases of the Eye. By J. Soelberg Wells, Professor of Ophthalmology in King's College, London; Ophthalmic Surgeon to King's College Hospital, and Assistant Surgeon to the Royal London Ophthalmic Hospital,

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Original Contributions.

ARTICLE XXXV.

ILEITIS. A CASE.

BY S. P. BREED, M.D., of Princeton, Ill.

Master Charles E. Newell, aged 16 years, compositor, of temperate and studious habits, after complaining for several hours, sent for me on the 10th of July, ult., to see him.

Found him with some fever, which had been preceded by a chill. Pulse 80, moderately full and strong. His greatest complaint, however, was *pain* in the *bowels*, somewhat paroxysmal, though never quite easy. The bowels were very little distended, elastic, and rather harder to the feel than natural, with tenderness on pressure. The tongue was moist and slightly covered with a *dark*, slimy coating.

On inquiring whether he had eaten any cherries (as it was in the cherry season), he said that *he had.*

He also stated that there had been no motion from the bowels for 24 hours.

I concluded, from the symptoms and history of the case, that there had been imprudence in diet; and, as he had vomited freely, and his stomach, therefore, pretty well emptied, I ordered the following:—

℞. Hydrarg. Chlor. Mitis,---------- grs. xx.
Ex. Colocy. Comp.,---------- grs. xx.
Morphia Sulph., ---------- grs. j.

M. F't pulv., No. 5.

Sig. One every three hours.

Hop fomentations to the abdomen, and enemata of starch and laudanum.

℞. Tinct. Opii, ---------- fl ℥ss.
Mucilago Amyli,---------- fl ℥ij.

M. F't enema. Repeat every three hours, if retained, until he sleeps.

July 11th. Physic not operated. Vomited after each powder, except one or two. Injections generally retained. Abdomen much the same; uniform tenderness over the whole abdominal region. Distention moderate, but *general.* No tumor in ileo-cæcal region. Could trace the pain to no local point of starting. Pulse 90. Some delirium during sleep. Had rested pretty well. Symptoms much as yesterday, in all other respects. Ordered the following:—

℞. Hydrarg. Chlor. Mitis,---------- grs. xx.
Ipecac, ---------- grs. j.
Morphia Sulph.,---------- grs. ij.

M. F't pulv., No. 10.

Sig. One every three hours.

Enemata and fomentations continued.

July 12th. Physic not operated. Injections mostly returned unstained. Urine free, but not remarkably high colored. The vomiting persistent, decidedly bilious, and very dark. Pulse 98, soft, *rapid*, and undulating: artery large, and circulation languid. Copious perspiration, especially during sleep, which stood in bead-like drops on his forehead and face. Tenderness of the abdomen much the same. Not much distention, though quite uniform. No flatus or meteorism. On applying the ear to the abdomen no *sound was heard*, no gurgling; but, on the contrary, a dead silence prevailed throughout the whole abdominal region. It was now observed, also that, during the

efforts at vomiting, the abdominal muscles did not coöperate with the thoracic and intercostal, but that they seemed utterly to refuse to act, which made his efforts to vomit peculiarly distressing. During the evening, the matter ejected by vomiting became of a grass-green color, and very acid, for which he took the following mixture:—

℞. Soda Bi-carb., ---------- ℥ij.
Morphia Sulph., ---------- grs. iij.
Aqua Mentha, ---------- fl ℥iv.

M. F't sol. sig. One teaspoonful every two or three hours.

During the colliquative sweating, he took the following:—

℞. Quinia Sulph., ---------- grs. x.
Syr. Rhei. Arom., ---------- fl ℥j.

Sig. Teaspoonful every two hours.

At this stage of the case, I omitted the mercurial, under the impression that it tended greatly to the prostration of the patient, while I could see no benefits from its use, as desired. Until now, I had contented myself with opiates, fomentations, together with mercurials, hoping by these means to overcome the difficulty, by first *subduing* the *inflammation*, *which* I *thought* to be the prime cause of the constipation. As the mercurials had no effect (probably from not being absorbed), and, as there was great solicitude on the part of his friends, because there was no operation, I ordered the following:—

℞. Senna Alex., ---------- ℥j.
Coriander, ---------- ℥j.
Aqua Fervent, ---------- 0j.

M. F't, infusum. sig. Half an ounce every hour. The bowels were now bathed with the following:—

℞. Sweet Oil, ---------- ℥ij.
Sp'ts Ammonia, ---------- ℥j.
Croton Oil, ---------- ℥ij.

M. F't liniment. sig. Apply to the bowels, and continued the fomentations, often renewed. Enemata with beef-tea added, continued at longer intervals.

July 13th. No operation yet. Vomiting continues. Senna-

tea thrown up. Countenance haggard. Expression anxious. Clothes quite wet with perspiration. Takes no nourishment, except the beef-tea in the enemata. Through this day he took ½ grain of morphia every two hours, and a dose of castor oil. His bowels were now bathed with hot oil of turpentine, and napkins wrung out of hot water were applied immediately, and this process repeated every half hour. Was called to the patient at 10 o'clock P.M. No operation; vomiting occasionally, matter ejected very dark; castor oil seen floating on the liquid. Has slept some. He now took 10 grains of calomel, with the hope that it would not be so easily rejected by the stomach, and might, therefore, be more likely to act as a physic than anything else that I could give. After waiting two or three hours, I determined to give an injection, sufficient to provoke an operation.

I thought of throwing this up high into the colon, through a bougie, but, as the injections had been generally retained, I felt sure that they had found their way up as high as I would be able to throw the fluid through the tube. Therefore, I omitted the tube, and injected some two quarts of soap, and tepid water, containing oil of turpentine and castor oil, well mixed together. This caused great pain, though he did not seem to realize where the pain was. When asked whether he did not desire to get up, he said, "Yes;" but when assisted to the sick chair, he made no efforts to procure an operation. No reflex action was called forth by the large enema, so as to induce straining; but, after sitting over the vessel some 10 or 15 minutes, part of the injection ran away, as clear as when thrown up.

I then order—

℞. Neutralizing Cordial, ---------- ℥ij.
Morphia Sulph.,---------- grs. ij.

M. Sig. A teaspoonful every two hours. A large blister over the abdomen, and an enema of beef-tea and laudanum, occasionally, as before.

July 14th. Was summoned to his bedside at 10 o'clock A.M., where I met Dr. G. W. Crossley, in consultation.

There was less sweating than yesterday. Vomiting had con-

tinued occasionally. Countenance anxious—very restless. Blister not drawn yet. Passed urine several times. Pulse 100. Artery large, and felt soft and undulating under the finger, against which the pulse dashed with a kind of wave-like impression, and was gone. Prostration evidently increasing.

The consultation resulted in the exhibition of the following:

℞. Hydrarg. Chlor. Mitis, ---------- grs. x.
Opium Pulvis,---------- grs. iv.

M. F't pulv., No. 4. Sig. One every three hours, with directions to interpose between each powder ¼th grain of acetate of morphia, until he was tranquilized. The vesicant was reapplied. Seen again at 4 o'clock. Blister drawn well. Three or four ounces of feculent matter had passed the bowels, the first that had passed during his sickness. Vomiting continues even more distressing. Matter gulped up, without much straining, nearly black. Hickups occasionally. Pulse 110, soft, feeble, and undulating.

July 14th. Vomiting still continues. Several small fecal stools. Other symptoms much the same. Evidently failing.

All medicine *per orem* discontinued. Half a grain of the acet. of morphia applied to the epigastrium, after removing the cuticle. Beef-tea and laudanum enemata continued, in small quantities, at short intervals, with the view of thereby contributing something to the support of the failing strength; hoping (forlornly) that these fecal passages might be a harbinger of something more favorable, and an index of a gradual subsidence of the inflammation, and a relief of the obstruction.

July 15th. Vomiting continues, and has become stercoraceous. Urine passed several times. Pulse 120, soft, undulating, and quite compressible. Countenance hippocratic. Patient very restless, somewhat delirious, though he answers questions correctly. No meteorism; no borborygmi during the sickness; bowels slightly tympanitic. No effort at straining when he had a passage; on the contrary, whatever was injected ran away involuntarily in the bed, generally very little stained or colored. All hopes of the case were now given up, and nothing more really important was attempted in the way of cure; but it may be

remarked that he took carbolic acid, properly diluted, with the view of correcting the fetor of the vomited matter, and it was also used freely in the utensils as a disinfectant, with much benefit.

The patient lingered on until 3 o'clock A.M., of the 16th, when he "passed that bourn whence no traveller returns."

This case had become one of great interest, from several considerations. The symptoms were so complicated that it was not possible to decide positively what the precise nature of the obstruction was. Moreover, only about two years before, Mrs. Newell had lost an older son, about the same age, with much the same symptoms.

This older son had the same obstinate constipation; all the symptoms of obstruction—stercoraceous vomiting, general tumefaction of the abdomen, tenderness, tympanitis, and the case, likewise terminated in death. He was treated, I understood, on the active cathartic non-mercurial plan, and finally was operated on by passing a bistoury into the abdomen, from which fecal matter issued through the wound. Before he died, however, (I was told) he passed fecal matter per *via naturales*. The history of the case had made a deep impression upon my mind; and when called to see Charles, I soon made up my mind that the chief difficulty proceeded, not so much from obstruction, as from inflammation in some portion of the alimentary canal; though I could discover no appearance of a tumor anywhere in the abdominal region, nor any accumulation of fecal or foreign matter, neither could I find, from the history, whether the pain had been at first local or not. Notwithstanding from a general survey of the whole case, the belief was strongly impressed upon my mind, from the absence of the *well-marked* symptoms of peritonitis, or from the superaddition of those that did not belong to peritonitis, that inflammation in the coats of the small intestines was the principal difficulty, and that this inflammation was to be met and subdued, not by *active cathartics*, but with *opiates*, *counter-irritants*, *revulsives*, and *mercurials*. Having thus made up my mind in regard to the pathology of the disease, and the proper mode to

pursue, and having followed it with such skill and ability as I could command, and having thus signally failed, as well as the advocates of the heroic cathartic plan had done before me, it became a matter of the deepest interest to me, to look into this somewhat obscure matter a little further. Hence, it will not be surprising that I felt much gratified when I was requested to make a *post mortem* examination of the case. Two persons in one family thus dying of the same disease, and *that* a somewhat obscure one, was sufficient to overcome any objection that they might otherwise have felt, and even make them anxious to know precisely what the difficulty was.

Accordingly, at 11 o'clock A.M., a few hours after death, I met Drs. Crossley, Latimer, and Winter, for that purpose. Before proceeding to the examination, however, a few minutes were spent in giving a brief history of the case, its symptoms, treatment, and reasons for the examination.

It was stated that the case was one somewhat peculiar, as the symptoms did not make the differential diagnosis fully clear. It could not be considered an open, plain case of enteritis, as usually understood, with the inflammation commencing in the mucous membrane of the bowels, and thence extending to the other coats, from the fact that there had been no diarrhœa, at any time during the illness of the patient; but, on the contrary, there was constipation all the time—obstruction. It does sometimes happen that obstinate constipation and all the symptoms of obstruction occur after an attack of diarrhœa or cholera morbus.

A case occuring in the practice of the speaker, several years before, was referred to, wherein all the symptoms of impassable stricture, *strangulation*, occurred, running on to a fatal termination; after what had been regarded at first by an intelligent physician as Asiatic cholera. In this case, the inflammation undoubtedly commenced in the mucous coat of the bowels, and thence extended by contiguity of tissue to the other coats. This was not the course of the disease, however, in this case.

Again, there were, it is true, prominent signs of peritonitis; but, then, these signs were not well pronounced, and unmixed.

There did not appear in this patient the small, frequent, and corded pulse, which are the usual accompaniments of peritonitis; but, on the contrary, the pulse was slow, soft, and unresisting. There was not, moreover, that amount of distention and tympanitis usual in peritonitis. No suppression of urine. The tenderness was not especially marked here, nor was the position that of peritonitis, the patient lying, as often as any way, on his side, with no disposition to flex the legs upon the abdomen. There were, however, *general* pain, moderate tumefaction, uniform over the whole abdomen, not traceable to any focus, from which the inflammation had radiated to other parts and tissues. These symptoms might lead us to suppose the case one of *peritonitis*, if we could forget the still more prominent facts of obstinate constipation, persistent and most distressing retching, and vomiting of bilious, acrid, and stercoraceous matters, all of which declare this case to be something more than peritonitis.

Another unusual symptom, in this case, is the remarkable torpor, stillness, and *dead silence* in the abdominal cavity. No rumbling, no flatus, no borborygmi, no gurgling sound, indicative of action of the small intestines, which usually occurs in mechanical obstruction, especially in that portion of the tube above the impediment. But, in this case, there was a fearful ominous silence, which is a mystery to be explained, if possible, by the examination.

Reference was made to the different forms of disease causing obstruction, which should engage the attention of the practitioner, whenever called to a case with such symptoms as point to obstruction; and he will run them over in his mind, one after another, and compare each with the one he has on hand, to see whether or not they agree. The first one, perhaps, that will be considered will be hernia. Having laid this over as not the one he has to treat, he next probably thinks of intus susception, intestinal concretions, volvulus, stricture from inflammatory adhesions, or thickening of the parietes of the bowels, and a consequent narrowing down of the caliber of the tube. Organized bands thrown across the passage. Such bands probably originate in an inflammatory adhesion of the surfaces of the

mucous membrane, in consequence of the effusion of coagulable lymph, and a subsequent separation of these surfaces before the lymph becomes consolidated, so that it is drawn out into apparently interlacing cords. Twisting of the bowels, so that a loop of the small intestine gets turned around upon itself, is another cause of fatal obstruction. This occurs sometimes from injuries, colic, etc. Still another cause of obstruction is strangulation, by the passage of a loop of the bowel through some abdominal opening, as, for example, through a rent in the mesocolon. Organized tumors are also sometimes found exterior to to the bowels, which, by pressure upon them, so diminish the caliber of the passage as to produce the obstruction. These are some of the principal causes which may produce obstruction; and although it may not be apparent in all cases, during life, as to which one, if any, of these causes occur in any particular case, yet, it is believed, that in most cases a careful investigation of all the symptoms, together with the whole history, will enable the physician to make out a pretty correct opinion. But, in the case before us, it was remarked, that a decided opinion could not be formed as to which one, if any, of the above classes it belonged. Hence the necessity for the examination.

On opening the abdomen, which was moderately distended, the peritoneum was found to be thickened, softened, and its bloodvessels enlarged, of a very dark color, but no effusion into its cavity. The small intestines (especially the jejunum) were nearly empty, *though not collapsed*, but generally discolored, from the effects of the previous inflammation, with extensive adhesions agglutinating them together in various places, and in abnormal positions.

The muscular coat of the small intestines, and more especially that in the region of the illeo-cæcal valve, was very dark, thickened, softened, and nearly in a state of sphacelus.

The mucous coat here was also thickened, softened, of an ash color, and thrown into rugous bands encircling the intestine, between which there seemed to be a solution of continuity, through which the sub-mucous and muscular tissues could plainly be seen, of a deep purple color. See specimen.

Stomach not opened, but its external appearance seemed healthy. And, as the intensity of the inflammation in the small, intestines increased as we passed down towards the lower portion, it was not thought necessary to examine the stomach further. Liver healthy. Gall-bladder moderately distended with healthy bile. The other organs examined were healthy.

There was no mechanical obstruction. No apparent impediment to the passage of the fecal matter, which was, moreover, soft and nearly fluid, and, therefore, altogether favorable to such passage. The bowels did not appear to be overdistended, at any point, with fecal, crude, or undigested matters. No impacted feces; no foreign substances lodged in any portion of canal, which could have produced the symptoms of obstruction. What then was the cause of the above symptoms? What was the pathology of the case? And what important practical lesson may be drawn from the facts before us?

It will be seen at once that this is a very interesting and instructive case. The difficulty was not found to be mechanical obstruction, from the retention in the bowels of any improper ingesta. Was it peritonitis? The symptoms did not pronounce it as such. Though there was peritonitis, there was, at the same time, *something more.* Was it enteritis? No, not simply enteritis, as usually defined in the books. It will be seen, therefore, that the symptoms and anatomical changes mark the case as *sui generis.*

It was not a case of obstruction from the effusion of lymph among the tissues of the intestinal walls; not intussusception volvulus; nor yet intestinal concretions of any kind. It was not a case of exantheme interne of the French, neither enteritis, nor yet typhlitis stercoralis, nor perityphlitis; as in these cases there would have been *at first pain* and *tumefaction* in the right hypochondrium, with a distinct hardness in this region, with, probably, symptoms of pressure upon the nerves, as they pass down to the right lower extremity, such as numbness, etc. These diseases are all excluded from the list, both by the symptoms and morbid anatomy in the case.

What, then, was the disease? This is the question. It was

inflammation of *all* the coats of the small intestines, extending nearly through the whole length of the jejunum, ileum, and cæcum.

Therefore, it may be declared that the obstinate constipation was the cause of the gastric irritability, by the operation of a well-known law of remote sympathy subsisting between distant portions of the alimentary tube. But what caused the constipation and symptoms of obstruction, it may be asked? Mucous inflammation? No. Peritoneal? No. We must look further than to the ordinary results of inflammation in these structures to find the explanation. What more have we left? The sub-mucous and the *muscular coats.* But these structures do not appear as distinct diseases in any of our learned works, on the diseases of the abdominal *viscera.*

It seems a little strange, when the importance of the function of the *muscular coat* is considered, that no distinct disease of this structure is described in our medical works. Can any one explain the reason for this hiatus? In the light of the pathology and symptomatology of this case, then, we will venture to *declare*, with much confidence, and, indeed, we would give *great emphasis* to the *fact*, that *inflammation* of the *muscular coat* of the small intestines is fully capable of producing *all* the *symptoms* of *obstruction*—strangulation. The implication of *this coat* is the cause of the superaddition of those symptoms which could not be accounted for otherwise.

The obstinate constipation, bilious, acrid, and even stercoraceous vomiting, it is believed, were, in this case, caused by the inflammation of the muscular coat of the bowels.

How did it do this? By arresting the function of the *muscular fibers* of the intestinal walls. *Inflammation* in these *circular fibers*, by suspending the normal molecular movements necessarily involved in their functional activity, and thus inevitably interfering with that sympathetic, consecutive, coördinate contraction of these fibers, which are the efficient, and, indeed, the only agents engaged in the propulsion of the alimentary mass through the intestinal tube, *will as surely* arrest the *vermicular motion* and *peristaltic action* of the *bowels* as any *concrete*

mechanical obstruction whatever, and will, therefore, give rise to all the symptoms of obstinate *constipation*, *physical obstruction*, and *impassable stricture*. This is the only hypothesis that fully explains all the foregoing group of symptoms. The dead silence; the significant, profound torpor of the small intestines can be accounted for in no other way. But it may be asked whether inflammation in these fibers is competent to produce this result? Let us see. When inflammation is set up, either in the peritoneal or mucous coat of the bowels, without extending into the muscular coat, we generally have diarrhœa. This diarrhœa is induced by an excitement of the excito-motory system of nerves, through reflex action. Thus, the muscular fiber is called into activity by the stimulus of a *contiguous inflammation*, and not from inflammation in its own tissue. It is a conservative remedial, and purely a physiological phenomenon, looking to the removal of the cause of the difficulty. But as soon as the *inflammation* extends into the substance of the *muscular tissue itself*, there will be, *not diarrhœa*, but *constipation instead*. I have already given one case, and I might give many more. It is, however, quite unnecessary, as all that is needed is simply to direct attention to the fact, and many instances illustrating this point will immediately spring to the mind. A muscle *inflamed* is not only indisposed, indeed, incompetent to act; but a forced action will be sure to increase the pain and aggravate the inflammation. If these statements are true, which, I doubt not, will be admitted, then this case becomes a most significant and important one to the medical philosopher, as it furnishes one more of the few cases recorded in the annals of medicine and pathology, to demonstrate the fact, that *inflammation* of the *muscular coat* of the bowels (which has been sadly overlooked) is fully competent to produce all the symptoms of strangulation.

The above is a good case in point to illustrate the practical bearings of this question. Had the case been regarded as one of mechanical obstruction, from the impaction in the canal of some foreign matter as the prime cause of the difficulty, and more vigorous measures employed, active cathartics brought

into requisition, it is *now* easy to see that such a course (which, it is feared, is too often pursued in similar cases) must have greatly aggravated the symptoms and diminished the chances of recovery. Let the practitioner carefully examine his cases of obstruction, and study well the differential diagnosis; and, if he have good reason to believe that the inflammation has its seat in the *muscular coat* of the bowels, either from the extension of peritonitis or enteritis, let him be careful how he tampers with active cathartics. On the contrary, let him put the bowels at rest; put them in splints, as it were, on the same principle that he would an injured limb; give them repose and time to recover; while, by the timely and judicious use of opiates, revulsions, *mercurial alteratives*, and other appropriate means, let him seek *first* to subdue the *inflammation* in these delicate tissues, so that they may be released from *restraint*, and *they* will *take care* of the *constipation.*

We have here, then, a notable case, where a considerable portion of the alimentary tube is so *paralyzed*, from the effects of *inflammation*, *involving all the coats* of the *bowels*, that all normal and physiological function is necessarily suspended between it, and the general system, responding to no medicines, awakened by no ordinary sympathies, controlled by a fatal synergy, bidding defiance to all available modes of treatment, and throwing a fearful spell, like some magic wand, over all the other functions and organs of the body, and drawing them with an irresistable power into its fatal toils. As we stand by and witness the progressive steps of this disease, as it advances unerringly to the very citadel of life, it requires no great stretch of fancy to imagine the system struggling in the iron grasp of some unseen antagonist, writhing in fearful agony, and straining every nerve to break the spell of the spoiler, and escape from his fatal meshes; but, like the fabled Prometheus, chained fast to the rock, while the vulture preyed continually on his liver, all efforts were unavailing; while the hidden foe "like a staunch murderer," steady to his purpose, redoubling his exertions, casts still further his mortal coils around his helpless victim, tightens more firmly his determined grasp, until one after another of the

struggling, quivering members are bound firmly, and fast, *pinioned*, "as with hooks of steel," beyond the possibility of escape; so that, further resistance being impossible, the only alternative left is a tame submission to the irresistible power of a hopeless destiny.

We can *now* understand *why* there was no *movement* of the *bowels*, no sign of *action* or *life*. Why that *dread* silence and awful stillness prevailed in the abdominal cavity, when all other organs were strained up to their utmost tension.

A fearful *inflammation*, *sudden*, *insidious*, and *destructive*, had seized, as with the hand of some etherial Titan, upon this portion of the body, arresting at once all the normal actions therein—muscular contractility destroyed, absorption through the thickened membrane stayed, molecular movements obliterated, and the nutritive function held in abeyance, until all the vital forces are brought to a dead lock, or converted into so many fierce enemies to human life and mortal flesh, to rankle and riot in their delectable work of destruction, disease, and death.

Such is the fate of all flesh.

ARTICLE XXXVI.

MILITARY SURGERY IN THE FRENCH ARMY.

By E. ANDREWS, M.D., Prof. of Principles and Practice of Surgery, Chicago Medical College.

The French Surgeons are much exercised at present over the enormous mortality of their military surgery, as compared with that of the English and Americans.

Last year, the *Gazette Hebdomadaire* published articles setting forth the frightful figures connected with the French surgery in the Crimean War. This year, Mons. le Dr. J. C. Chenu has published a work, in two large quarto volumes, with a folio atlas, on the surgical results of the last French campaign in Italy, at the time Napoleon III. expelled the Austrians from Lombardy. Notwithstanding that Northern Italy has a fine

climate, lies close to the borders of France, and abounds in everything necessary for wounded men, the same frightful excess of mortality in French surgery is displayed, which was before seen in the Crimea. The following table illustrates the differences between the different armies:—

OPERATIONS.	U. S. Army, War of Secession.	English Army, Crimean War.	FRENCH ARMY.	
			Crimean War.	Italian War.
Disarticulation of Shoulder,.....	39.2	33.3	61.7	52.7
Amputation of Arm, ...	21.2	24.5	55.5	55.8
Amputation of Forearm, ...	16.5	5.0	45.2	42.8
Disarticulation at Hip-joint, ...	85.7	100.0	100.0	57.1
Amputation of Thigh, ...	64.4	64.0	91.8	76.4
Amputation at Knee, ...	55.1	57.1	91.3	75.0
Amputation of Leg, ...	26.0	35.6	71.9	66.5
	40.2	33.9	72.8	63.9

PER CENT. OF MORTALITY.

From this, it appears that the mortality after French military amputation has been about 60 per cent. greater than in the American army, and nearly one hundred per cent. greater than in the British. The *Gazette Hebdomadaire* takes up the controversy, and attributes this disastrous result to two main causes:—1st. The organization of the army which makes the surgeons dependent on the *Intendant* (a sort of Quartermaster) for supplies; in consequence of which the wounded were often short of good rations, and, 2d. The reckless transfer of patients from one hospital to another. It does not seem to me that the writer in the *Hebdomadaire* makes his points well. In the U. S. Armies, the Medical Department was absolutely dependant on the Quartermaster and Commissary for supplies, and partly so for transportation. All branches of the service are in the same condition in that respect, and, in the nature of the case, must be. In the turmoil of war, rations will get stopped or damaged occasionally; and yet we did not find that short or even damaged rations were half as injurious to the wounded as some other things to be presently mentioned. A similar criticism may be made respecting the assertion, that the transfer from hospital to hospital was necessarily a chief cause of mortality, and a reason why their men suffered more than ours.

No doubt, transportation injures some patients, but when done in open, airy, and not crowded conveyances, it does much less harm than we formerly supposed. On Sherman's march to the sea, the wounded were all carried through to Savanna in ambulances, shaking and jolting over bad roads, and yet the amputations recovered magnificently. No set of wounded men ever did better, evidently because they had the freshest of pure air. In active military operations, the hospitals near the front must often be abandoned and the patients transferred; besides, they become overcrowded, and require relief for that reason, otherwise, half the patients will die of typhus, erysipelas, hospital gangrene, and pyæmia. I believe that we had in our army more such transfers than the French, and yet we suffered less mortality, by 60 per cent. It is not difficult for an observant military surgeon to conjecture the true cause of the French ill success. There is but one thing which can produce so many deaths after amputations as M. Chenu describes, and that is overcrowding, or what amounts to the same thing, foul air and bad ventilation. Overcrowding, and consequent foul air, means putrefaction, erysipelas, hospital gangrene, pyæmia, and death. When surgeons lose 55 per cent. of their amputations of the arm, and seventy per cent. of their amputations below the knee, we know very well what that means. It is of no use to accuse the short rations, mouldy "hard tack," or rough transportation; such men have assuredly been overcrowded or under-ventilated. They have breathed the effluvium of each other's wounds, until their whole systems were permeated with the germs of putrefaction, and were ready to succumb to every operation, however slight. American surgeons tried that out on the large scale early in the war, but, fortunately, they had sense enough to learn from experience, and not to perpetuate their early blunders.

I have no doubt that the following is a true account of the matter. Frenchmen have very little comprehension of the amount of fresh air which wounded men require. Even Velpeau, that old giant of French surgery, was a wretched sinner against science in this respect. I well recollect walking the

rounds of his hospital with him, and noticing that his wards literally stank with foul air. I was not at all surprised to notice in his hospital reports, that in the winter season (when windows are shut, and fresh air almost excluded) he had a regular annual epidemic of malignant erysipelas. When the men, field-officers, and surgeons of an army are alike destitute of any idea of the danger of ill-ventilation, death will reap a harvest out of their ranks. The plains of Lombardy are full of village and buildings of every description, erected for anything else but ventilation. I presume the wounded were crowded into these buildings, in the first place, as the nearest solid shelter. There they got their first poisoning. Then they were sent in ill-ventilated, crowded cars, by rail, to Genoa, and absorbed their second course of putrefacient germs. At Genoa, they were placed into, close, sea-going vessels, which are the most deadly and unventilable machines ever contrived for the destruction of wounded men, and taken a voyage to Marseilles, and thus drank their third course of putridity. If any of them did not die by this time, it was because they were proof against all ordinary causes of destruction. I presume that this, or something like it, was the true surgical history of the Italian campaign of Napoleon III. If the French surgeons, in their next war, will see to it that every wounded man, from the hour of battle to the day of his recovery or decease, breathes no air but that which is as fresh and pure as that in the sky, they will find that their statistics of amputations will compare favorably with those of any nation.

ARTICLE XXXVII.

BACKWARD CURVATURE OF THE SPINE.

ITS PATHOLOGY AND TREATMENT.

By J. S. SHERMAN, M.D., Lecturer on Orthopœdic Surgery in the Chicago Medical College.

The neglect of surgical authors treating of diseases of the spine, must be plainly visible to any one examining the subject from the text-books of the present day, and much more evident in those of older authority.

A few general remarks on their appearance, cause, and treatment is all the information given, and the practitioners with a case under his observation, turns from the books with little or no idea as to the best course to pursue with his patient. An apparatus of some kind is recommended, which lifts from the axilla, to remove weight from the spine. Bringing pressure on the axillary nerves, where it cannot be tolerated by any child or adult. When we consider that the shoulders are freely moveable, upwards and downwards, to a very considerable extent, it is evident that they must be raised as high as the ears, before they begin to relieve any weight from the bodies of the vertebræ. Yet these concerns are often fastened upon the backs of patients, with the seeming idea, that there is something curative in the simple contact of them. The relief of pressure from the inflamed bones, is by no means accomplished. In addition to the mechanical treatment, the seaton and irritating applications, upon and in the neighborhood of the spine, are still advised. The origin is generally referred to scrofula or tuberculosis, and said to occur mostly in the children of the poor, and badly fed, being one of the diseases most frequently found in poverty and rags. From this doctrine and treatment, I think we have the best of reasons to dissent.

Those treating the disease most extensively, do not refer its origin to a deposit of tubercle. Nor do they most frequently meet with it among those deprived of the necessaries of life.

The strong and robust are as often its victims as the weak and sickly. Taylor claims that the former are more often its subjects.

Adams, one of the surgeons to the Royal Orthopœdic Hospital of London, told me that in his practice he had seen the disease as frequently in patients without the hospital as within.

My own observation coincides with that stated, and I have been able, in the majority of all cases, to trace the point of departure directly to an injury. It is not strange that the backs of children are injured by slight falls, or by twisting the spine. The cartilagenous attachments of the five centres of ossification in each vertebræ, become consolidated only in the adult. In early life an inflammation is easily awakened in this tissue by violence. I have recorded in this city three cases of the disease occurring in adults, all strong and healthy. The first: a man aged thirty years, by trade a painter, fell from a scaffold and was treated for a sprain of the back; he partially recovered and was again able to do light work. Four months after, a decided projection of the tenth dorsal vetebræ was noticed, with all the characteristics and symptoms of "Potts'" disease.

The second, a laborer, aged thirty-five, was injured by falling from a car. Three months after the injury, projection of the sixth and seventh dorsal vertebræ occurred.

The third, a physician, presented symptoms of inflammation of the vertebræ, six months after a slight injury of the back.

I cite these cases to show that the disease occurs from injury of the spine, in the adult as well as the child; that it excites an inflammation, simple in its character, at first involving the cartilages only, but in time producing the backward curvature.

The tubercular constitution is not necessary, and in a majority of cases neither exists, nor is it developed. We have to contend with a simple inflammation, but one occurring in structures surrounded by conditions which will not allow of spontaneous recovery. These conditions are, constant pressure and movement on the inflamed surfaces.

The treatment consists in relieving pressure and securing immobility. We are not able in the spine, as in the joints, to

make direct extension, but overcome pressure upon the bodies of the vertebræ, by supining the back and bringing the line of gravity through the articulating processes, which are not involved in inflammation. This is the object of all mechanical appliances and those are useless which do not accomplish it. Confining the patient to bed should be avoided as much as possible, as such a course impairs the general health.

Various forms of apparatus have been constructed by different surgeons. From experience in the use of all, I find none which so well fulfils the indications for treatment, as that figured in cut No. 1. This accomplishes its purpose so effectually, and is tolerated with such ease and comfort to the patient, that I have used no other for the last year.

In children it forms a support for the back, which they can wear night and day, and in which they can be carried about with ease and safety.

Often, in the early stages, the inflammation extends to the sheath of the spinal cord and is prolonged over the coverings of the nerves, deriving their origin from the diseased point. This frequently causes paralysis of the structures supplied by them. It always somewhat impairs their function. Pain, when present, is referred to the termination of these nerves. Disease in the cervical region impairs the power of speech, and sometimes the memory. In the dorsal, apparent gastric trouble and disturbance of respiration. In the lumbar region, pains in the bowels, with a diminution of control over the legs.

Occurring in any portion of the column, the patient makes an effort to supine the back and avoid any jar in walking. The positions which are taken show a desire to transfer the weight from the bodies to the articulating processes.

The diagnosis can generally be made from these symptoms *before* any projection is seen. It is important to recognize the condition early, as we may then prevent deformity, and restore to the patient a spine perfect in its symmetry.

After the disease has advanced to the loss of substance of the bodies and projection of the spinous processes, the diagnosis is no longer a matter of doubt, and we can then only hope

to save life and produce anchylosis of the vertebræ in their deformed position.

The restoration of lost bone does not occur.

Fig. 1.—Apparatus for Backward Curvature of the Spine.

The mode of constructing the spinal support is as follows:

The patient is placed upon the abdomen, the chest and hips being supported by pillows, so that the back is supined. In this position a mould in plaster of Paris of the back, hips, and shoulders is taken. From this a cast is made which gives an exact model of the back, with the column supined. A piece of sole leather, soaked in water, until soft and pliable is lashed upon the cast, and remains until dry.

The front is completed with a corset and axillary straps. A few strips of steel are riveted to the backpiece to prevent its form changing. When adjusted the back is secured in the supined position, the bowels supported by the corset, and the line of gravity thrown through the articulating processes.

Absolute immobility is secured. The relief to the patient is decided and immediate. When the disease occurs in the upper cervical vertebræ, it is not so easy to remove pressure. In these cases the weight of the head must be *directly* removed from the inflamed bones.

We can here use the shoulders as a support for an apparatus. Those forms by which the head is secured with a chin and occipital strap, cannot be tolerated when sufficient tension is made on them to support the weight. The accuracy with which we can adapt leather to a cast, and the evenness with which it distributes the pressure when applied to the body, has led me to construct an apparatus for the relief of these cases, in the

same manner as for those occurring in other regions of the spine.

Figure 2, represents the instrument. A cast is taken, reaching from the shoulders as high as the mouth in front, the ears on the side, and the bulge of the occipital bone behind. Leather is then moulded upon this as in the construction of the first apparatus.

Fig. 2.—Apparatus for Potts' Disease in Cervical Region.

From either shoulder rises a rod upon which is cut a screw. The chin and occipital piece are divided laterally and the upper margin of each surrounded with a steel strip. The posterior half having upon each side a slot, into which the steel of the chinpiece slides, and is secured with a thumbscrew.

This allows us to easily apply the head piece, and to grasp with any amount of firmness. The screw rods, provided with a nut, pass through a ring attached to the steel band surrounding the headpiece.

By turning the nuts we are enabled to lift the entire weight of the head from the cervical vertebræ. The inner surface is lined with soft buck-skin, and no inconvenience is complained of by the patients wearing it.

TREATMENT OF ABSCESS.

When the inflammation has progressed to caries and suppuration, the abscess may point either in the groin or upon the back.

As soon as we are confident of its nature, the contents should be evacuated.

The controlling effect of carbolic acid over suppuration bids

fair to render the treatment of these abscesses much more satisfactory than formerly. A saturated solution of carbolic acid and water, should be injected daily, and the opening sealed with a pledget of cotton dipped in a solution of eight parts of either castor or linseed oil to one of the acid.

This destroys any germs which may have entered at the time of opening. The treatment must be effectually and diligently followed until the abscess heals. The pain and tenderness often rapidly subsides, and the apparatus can be worn and only removed when the abscess is injected.

The general health of the patient should be carefully supported. Fresh pure air is of great importance. The administration of iron, quinine, and the mineral acids will be found most useful.

The cure is always slow, and improvement follows only after weeks and months. Yet, by careful watching of these cases, I think the surgeon will be rewarded with as large a proportion of success as he meets with in the treatment of any other surgical disease.

81 Monroe Street.

ARTICLE XXXVIII.

MILITARY SURGERY AMONG THE APACHE INDIANS.

BY E. ANDREWS, M.D., Prof. of Principles and Practice of Surgery, Chicago Medical College.

The Apaches of New Mexico and Arizona are the most inveterate nomads, perhaps, in the world. They not only have no agriculture, but they despise even the chase. The only occupations they deem worthy of a man are stealing and fighting, the first being the most honorable. Like other Indians, they have their medicine men, and, from the necessities of their position, they have developed a set of ideas and system of practice in military surgery.

Incantations, and other modes of appeasing the unseen powers, constitute a large portion of the resources of the Apache military surgeons, but they are by no means altogether negligent of material appliances. Their prime idea is that the chief danger of a wound is from the loss of blood, a notion which must have been very near the truth in the days when they only received wounds from knives and arrows. They have no idea of a circulation of the blood, but suppose that each part of the body has its own permanent stock of that fluid; but they recognize that hemorrhage from the head, neck, and breast is more dangerous than that from the extremities. From this prime pathological idea, they have naturally made the deduction that the chief surgical aim should be to plug the wound, and thus put a stop to the hemorrhage. This pathology and treatment they doubtless established centuries ago, from observations upon the incised wounds made by arrows and knives, and being eminently conservative, they naturally apply the same notions and treatment to the gunshot wounds which they receive from the U. S. troops and white settlers.

The first care of the Apache medicine-man, is to have on the field of battle some fresh boughs of the ash, whose leaves are used in the dressings. Quite as important, also, is a quantity of the mescal root. The latter is a nutritious root, which is roasted and carried with them as food. When it is chewed and the nutritive part extracted, there remains in the mouth a wad of woody fibres, like a plug of coarse tow. The doctor first lays on the wound a fresh ash leaf; he then places on it a plug of the chewed mescal fibres, and thrusts the whole into the wound, a plan which in arrow wounds must often be very useful, but rarely of any benefit in gunshot injuries, as the latter seldom bleed. It would seem that they are not content to leave the tampon quietly in its place, but deem it important to change it frequently. After one of the battles in New Mexico, where some twenty or thirty savages were wounded, the U. S. surgeons found the Apache field hospital, and discovered in it about a bushel of the bloody mescal plugs, which had accumulated from their constant change of dressings. After this pro-

cess has been continued until they deem the danger of hemorrhage entirely over, the next step is to go deeper, for the first plugs were only pushed into the orifices of the wounds. They now fill the entire track of the arrow or bullet to its extremity, with a tampon which, they allow to remain a short time. Finally, they remove it, and complete the cure by the application of herbs externally. All this treatment is accompanied with a suitable amount of superstitious mummery.

During the past year, Mr. S. D. Phelps, a citizen of Chicago, accompanied the U. S. troops to an attack on one of the Apache villages, which was taken by surprise. In the rush, Mr. Phelps came in contact with the medicine-man, and shot him, and as a matter of course, captured his set of surgical instruments. They consisted of five stones and a sea-shell. The stones were carbonate of lime, and were cut out of pieces of beautiful stalagmite, from some cave or spring, the stone being handsomely striped with black and fawn-colored veins. Four of the stones apparently constituted a set of tamponers. The largest was about five inches long, cylindrical and slightly tapering, and was just about the right size to enter a wound made by an army musket-ball. The others were of successive sizes, smaller, and probably used in the same way on the wounds made by the very small stone arrow-heads, of the Apaches and other tribes of that region. The fifth stone is supposed to be a charm only. It represents in form the Texan armadilla, and the stone is ingeniously cut in such a way that the bands of color show stripes across the back like the rows of scales on the armor of the armadilla. The eyes of the animal are represented by pieces of mother of pearl, set into the stone. The sixth object was a sea-shell, perforated and suspended to the neck by a string. It was probably a charm. When the stones were shown to the squaws captured in the assault, the latter exhibited great emotion, and begged that they might be thrown away, otherwise they said not a single soldier would live to return to his camp.

Mr. Phelps has presented these relics to the Chicago Academy of Science, where they may be seen, with other ethnological curiosities, by those desirous to investigate such subjects.

Foreign Correspondence.

HEIDELBERG, *August 13, 1869.*

DEAR EXAMINER:—Being in Zurich a few days ago, I took occasion to visit the Canton's Hospital, which has about four hundred beds. I first attended the clinic of Prof. Horner, who has charge of the department of the eye, and saw some operations for cataract and the removal of pterygii. Prof H., though a comparatively young man, is a careful operator and instructive lecturer. Like most other operators on the eye whom I have seen in Austria and Germany, he ordinarily operates without an anæsthetic. What the comparative successes of eye operations with and without chloroform are, I am unable to say. I am not aware that there are statistics on the point; nevertheless, I have been led to believe from witnessing numerous operations, that if there were any difference in results, the more favorable they must be with the use of chloroform. I have seen many patients who were entirely powerless to hold the eye fixed on the approximation of the knife, consequently its point has had its entrance and exit far from the place intended, and once, through a sudden movement of the eye, came out through the centre of the cornea; and for the same reasons the iris and other structures of the eye are often mutilated, causing iritis, keratitis, etc., and often loss of the organ, apparently, at least, through unnecessary irritation, which in a great degree might have been avoided with chloroform.

I also noticed that Prof. Horner did not release his hold on the conjunctiva with the pincettes, or remove the speculum until the operation was entire, while others have told me that this mode of procedure was more or less dangerous, as the patient often brings so much pressure to bear as to rupture the capsule of the lens and cause the escape of more or less of the vitreous body, which does not so often happen if the pincettes are removed before the flap is completed. Although this is not an eye journal, Mr. Editor, yet as the general profession is be-

ginning more and more to look up these departments called specialties, I have inserted these observations as perhaps interesting questions. Prof. H. has about thirty eye patients in his wards, and five to twelve out patients, that visit his clinic at the hospital. His assistant gives a course on ophthalmoscopy from time to time, but the material is not very abundant. The number of eye students is also small.

I next visited the surgical clinic of Prof. Rose, who had many interesting cases. Prof. Rose is successor to Prof. Bilroth, of Vienna, and though a man of not so extensive and profound learning as Prof. B., yet is quite efficient for his position, and fills it with satisfaction to his students. The surgical class is small—perhaps thirty or more—and enjoys the best of advantages for witnessing operations, and its members are often permitted to perform many important ones. I made the morning visit with the Professor, and saw about eighty instructive cases. I was convinced that Zurich is a better place for surgery than Vienna. I think Prof. Billroth has confessed the fact since he went to Vienna. In Vienna, one sees a large number of ulcers, necroses, strumous tumors, etc., while in Zurich, one sees a larger number of fractures, amputations, and wounds. I saw a child, nine months old, that had prolapsus ani for six months. All forms of treatment had been fruitless. The Professor was using no carbolic acid in any of his cases, but preparations of zinc, potash, etc. Prof. Biermer gives a medical clinic five times a week. Prof. Gusserow gives an obstetric and gynäkologische clinic with touchirübungen four times a week; also, an operative midwife course three times a week. The number of births in the hospital, however, scarcely exceed two hundred a year, consequently this branch is practically better studied elsewhere.

I saw several female students from America, England, and Russia, at the clinics, who, on account of the moral salubrity of the city and the respect shown them by the students, find it an agreeable place to study. The whole number of medical students, I think, is less than a hundred.

In Lerne, I had the pleasure of meeting Prof. Jewell, who for

several semesters has ably filled the chair of anatomy in Chicago Medical College, and is now on a visit to this country and the East, for studies in philosophy, biblical history, etc. The Professor has already achieved a fair fame as a lecturer and writer on science and metaphysics, and is rapidly widening his reputation. May success attend him in his new field of labor.

The Heidelberg University has for generations been one of the most celebrated of Europe, and in many respects is still entitled to the appellation; yet larger hospitals have attracted students elsewhere, so that of the eight hundred or more students who resort here for learning, barely more than a hundred are students of medicine. The city has only about 17,000 inhabitants—hence its hospital wards cannot be very rich in material. There are, however, in the general hospital about one hundred and forty patients, and in the eye hospital thirty-five. Surgical students enjoy very good advantages here, as the number is small, and Prof. Simon allows them to perform nearly all the operations, as amputations, resections, etc. Prof. Moos gives courses on the ear of 6–8 weeks duration, and has a tolerable supply of patients. Prof. Becker has an ophthalmic clinic four times a week at the eye hospital, and has about six out patients daily. He also gives instruction in the use of the ophthalmoscope three times a week, for which patients come from the blind institute, in an adjacent town. The class also visit Mannheim, a city half an hour by rail distant, twice a week, to see cases. Above all, however, Heidelberg is to be recommended to the student of anatomy, chemistry, and physiology, for which he can enjoy ten-fold better opportunities than in Vienna, or many other larger schools. Profs. Bunsen, Helmholtz, Arnold, Nuhn, etc., who occupy these chairs, attract justly many admirers. Prof. Wundt gives a course of lectures on psychology, also on anthropology. Prof. Helmholz gives a course on the "general results of science," with especial reference to biology. I read awhile ago that Prof. Bunsen had lost his second eye by an explosion. Such is not the case. I am told he was but slightly injured, and has now entirely recovered.

Yours, truly, F.

Correspondence.

FORT WAYNE, IND., *August 25th, 1869.*

DR. N. S. DAVIS, *Chicago, Ill.:*

DEAR DOCTOR:—Having recently made use of carbolic acid for the destruction of maggots, inhabiting a locality which rendered their mechanical removal impracticable, with good results, and never having seen an account of the same application, I am moved to give an account of my experiment.

On the 4th inst., I was called to a case of *epithelial carcinoma*, in which the soft parts of the nose had been entirely destroyed by the insidious disease, which had also penetrated far into the nasal fossa, and rendered the poor sufferer an object of pitiful disgust by its terrible work; and now, as if this was not enough, she had fallen victim to the *fly*, and was verily *food for the worms while she yet lived.* The sight was indeed most sickening; for the left nasal fossa, laid open and gaping from the removal of the soft parts, *was completely filled with maggots*, of large size, some of them being half an inch in length, and all, with their accustomed activity reveling on human flesh. To add to the disgust, one would occasionally come wriggling out of the patient's mouth; and the left eye, the sight of which was gone, was also filled with these loathsome things; so that it would seem that the entire face was alive with them. Whether the nasal duct had been enlarged for their convenience, or whether they were of a separate deposit in the eye, I know not.

The patient was a Frenchwoman, about 50 years of age, and had been afflicted for a number of years; but this once being the only time I saw her, I can give no history of the case, and none is needed. At this time, she was greatly prostrated, and when undisturbed by attendants, she did not suffer much pain, and manifested but little consciousness, whereas, a day or two before the maggots were noticed, her suffering was intense. Now, the removal of these intruders by the usual means was rendered out of the question, by the extreme sensativeness of

every part of the patient's face, which forbade a touch even; and to make no effort for their removal, even though I knew her to be dying, would seem criminal to her friends. Consequently, I ordered an anodyne, to aid her in bearing the attempt, and for the destruction of the maggots; as a vermifuge, I ordered a solution of carbolic acid, 20 gr. to the ℥; to be applied greatly reduced at first, the strength to be increased as it could be borne. The result of this was eminently satisfactory; two or three applications not only destroying and removing every maggot, but also otherwise cleansing and purifying the foul sore in a remarkable degree, which was followed by general improvement, so that the patient rallied, partook again of nourishment, and for three or four days seemed a great deal better.

A word with regard to the use of carbolic acid, as a wash for indolent ulcers. A case of two years standing, very severe, at times threatening the patient's life, which had bade defiance to almost every thing—carbolic acid included, used very strong—is now yielding and healing kindly under a very weak application of the acid. Of a solution of 20 grs. to the ℥, only 15 or 20 drops are added to a teacupful of water, and this is applied twice a day.

P. G. KELSEY., M.D.

Selections.

MEDICAL SOCIETY OF COUNTY OF NEW YORK.

Stated Meeting, March 1st, 1869.

Dr. GEO. T. ELLIOT, Jr., President, in the Chair.

After transaction of the usual preliminary business, and the reading of the reports of committees, a paper was presented by Dr. F. D. Weisse, entitled "Lister's Antiseptic Treatment in Surgery." This paper is published in full in the *Medical Record*, and we therefore present only a summary thereof.

After stating the object of the paper, the author gave an historical sketch of the introduction of the antiseptic treatment

of wounds, accrediting Mr. Lister, of Glasgow, with the chief merit of originating and perfecting this system of treatment—although he had been anticipated by many in the use of carbolic acid, for its antiseptic qualities.

The mortality of surgical cases is generally due to one of *four* general causes:—

1. Shock from injury or operation.
2. Consecutive inflammation, with sequelæ of injuries and operations (profuse suppuration, pyæmia, etc.)
3. Heterologous formations (cancer, etc.)
4. Degenerations of tissue which destroy the integrity of organs, such as calcification and atheroma of the coats of arteries, leading to gangrene, aneurism, etc. The second of these general causes is the most prolific source of mortality in surgical practice.

The cause of all these disturbances in surgical cases is usually, in the opinion of Mr. Lister, the irritating and poisoning influence of decomposing blood or sloughs. The essential cause of suppuration in wounds is decomposition, brought about by the influence of the atmosphere upon blood or serum retained within them; and, in the case of contused wounds, upon portions of tissue destroyed by the violence of the injury.

Proof of this is obtained from the fact that, within 24 hours after the accident, the colored serum which oozes from wounds is already distinctly tainted with the odor of decomposition; and during the next two or three days, before suppuration has set in, the smell of the effused fluids becomes more and more offensive.

These putrid fluids may be absorbed, and so give rise to constitutional irritation—the term so generally employed to express the infection of the system from the absorption of poisonous materials.

Microscopical examination of the atmosphere shows conclusively that it contains innumerable germs of living bodies, and the varied experiments, by Pasteur and others, prove that to the presence of these germs in fluids decomposition is due. Prevent these germs absolutely from entering fluids, and no such thing as fermentation or decomposition can take place. Thus the old idea that putrefaction was effected by the oxygen of the atmosphere is exploded.

From this we know that the unhealthiness of crowded hospital wards is due principally to the presence of these germs in the atmosphere.

The claims of antiseptics in surgery are based upon the fact

that they have the power of destroying these germs, and thus rendering the air free from septic influence upon wounds.

The power of sulphurous acid in preventing and arresting fermentation and decomposition has long been an established fact. To Polli, of Milan, we owe its therapeutical application. The virtues of choloride of zinc have been advanced by Mr. Campbell de Morgan, of the Middlesex Hospital, London. The sulpho-carbolates of soda, etc., have, of late, been brought forward as more efficient than sulphurous acid preparations, by Mr. Arthur E. Sansom. Carbolic acid outrivals them all, however, as a general local application in surgical practice.

The advantages which Mr. Lister finds that carbolic acid possesses are:

"1. It is a most potent poison to the low forms of life which determine putrefaction, and it retains this power, even though diluted to such a degree as to be almost entirely unirritating to the tissues of the human body.

"2. It is volatile, and its vapor is quite efficacious as an antiseptic upon the air in the vicinity (of wounds).

"3. It is a local anæsthetic, and exercises a most soothing influence upon a painful wound.

"4. It is soluble in a variety of liquids of very different properties—and each of these solutions has its own special value in practice."

The preparations of carbolic acid which have been employed by Mr. Lister have been of various strengths, ranging from the pure acid (liquefied crystals) to a dilution in the proportion of one part of the acid to forty parts of a suitable solvent or vehicle. The glacial or crystalline form is used in all his preparations. (It is solid at ordinary temperatures, but melts readily when heated, or when a little water is added to the crystals.)

In his earlier cases of compound fractures, etc., Mr. Lister used the pure acid (deliquesced crystals); but he renounced it, because it induced too much unnecessary irritation, increasing discharge, and thus retarding cicatrization.

The materials used in the present system of treatment are liquid and solid preparations of carbolic acid, and pieces of block-tin, tin-foil, etc.

Liquid solutions: 1. In water; 2. In oils or glycerin; 3. Alcohol.

Solid preparations: Paste or putty; 2. Plasters; 3. Ligatures.

LIQUID SOLUTIONS.

1. In water: "Water dissolves but a small portion of the

acid, only 1-20th part of the pure crystals, and holds that small quantity very loosely, so as to permit it to act with energy on any substance for which it has stronger attractions, and also to become dissipated by exposure." It is applicable as a wash to the interior of recent wounds, whether the result of accident or operation.

2. Oily solutions. (Linseed and olive oil, glycerin.) "The fixed oils have so strong an affinity for the acid, that they will mix in any proportions with it, and hold it so firmly as not to permit it to act with much energy on the tissues, or to become dissipated into the atmosphere."

3. An *alcoholic solution* of one to four has been used. Alcohol readily dissolves the acid crystals, almost equal to the oils: but, like the watery solution, it holds it but loosely. For this latter reason it is applicable to the surface of wounds, etc., especially those that have been exposed for several hours after injury.

SOLID PREPARATIONS.

1. Paste or putty.

This is an oily application made to assume a solid form. Linseed-oil, four parts, carbolic acid (crystals), one part, enough common whitening to form a paste of the consistence of glazier's putty.

2. Plasters.

These are made with olive-oil, litharge, beeswax, and carbolic acid, one to ten, one to twenty, and one to forty. They are reliable, retaining their virtues for many hours. As an external dressing or guard, they shed the discharges freely, and keep all underneath antiseptic. They possess some disadvantages, and have more recently been superseded by what Mr. Lister calls the *antiseptic lac.*

It consists of shell-lac with which carbolic acid will mix in any amount by aid of heat; when mixed in right proportions it may be spread, when cool on calico. In this manner a large quantity of the antiseptic is stored up. It is not softened by the discharges. By brushing over the surface with a weak solution of gutta-percha in bisulphide of carbon, it is rendered non-adhesive. We have in this a durable and perfectly reliable antiseptic external dressing or guard, and at the same time a light and neat one.

3. Antiseptic Ligature.

This is prepared by steeping the silk thread for two hours in strong fluid carbolic acid, prepared by adding a small proportion of water to the crystals. This ligature is applicable to the

deligation of main arteries in their continuity, or arteries on the face of a stump or wound.

The antiseptic curtain is a piece of muslin saturated with oily solution of carbolic acid, under which cavities are punctured, to prevent regurgitation of any air except that which has been deprived of its germs by being filtered through a carbolic acid vapor. The antiseptic guard is the external antiseptic dressing, which is a reservoir of the acid, to be replenished from time to time, preventing the introduction of septic germs to the wound, and yet allowing the discharge to flow out under it.

In the manipulations required in carrying out the antiseptic system of treatment, we must ever bear in mind the existence of septic atmospheric germs, and be particularly careful in not allowing the air to have access to the surface of a solution of continuity or cavity before it has been filtered through an antiseptic dressing.

The watery solution should be freely applied to all wounds of whatever character. In compound fractures, care should be taken to have the solution penetrate to all the recesses of the wound; during and after the performance of all surgical operations, the cut surfaces should be washed with it.

The alcoholic solution is to be used in the same cases when some hours have elapsed between the solution of continuity and the application of the antiseptic.

In the performance of operations, all the instruments, probes, knives, etc., should be dipped into a solution one to four of olive-oil before being used. If the operation involves the opening of a joint or serous cavity, drop a one to four solution in the track of your incisions.

In external wounds opening into the pleura or peritonæum, a solution one to four may be introduced by strips of lint into the cavity.

Dr. Weisse closed his paper by a summary of the modifications of our pathological views, which in his estimation were forced upon us as the results of the antiseptic method of treating wounds, and he also gave a *resume* of the various applications of this method.

Dr. E. R. Squibb was called upon by the President, and remarked: I have some knowledge of carbolic acid which I may add to that given in the very interesting paper we have just heard. I confess to a strong prejudice, since first reading Mr. Lister's articles, against what I have regarded as a needless complication of a simple method already well known. Moreover, Mr. Lister's honesty and earnestness grew into fanaticism,

and led him to exaggerate and over-dose. At first he was inclined to use the undiluted acid in wounds; but he has now got down to two per cent. in water, and finds this strong enough.

We have been misled a little in the use of the crystallized substance known as carbolic acid. The term has ordinarily been applied to three associated substances, phenyl-alcohol, cresyl-alcohol, and xylic-alcohol, belonging to a series which includes most of the aromatic oils. They have all been pretty well proven to be alcohols, and they are not acids by any definition of this word. Of late, however, it has been disputed by Kekule and others that these substances are alcohols, and this opinion would seem to be gaining ground. Of these three tar-alcohols, the phenyl is crystallizable, and has the lowest boiling point. As these became an object of commercial manufacture, the matter was taken up by a Fellow of the Royal Society, a pupil of Laurence, Mr. F. Crace Calvert. Seeing that there was one of the group which required much chemical knowledge and skill to produce it nicely, and knowing that, should he attempt the manufacture of the others, he would be subject to much competition, he turned all his attention to the production of the most difficult, the crystallized phenyl-alcohol, without knowing that it was the least effective of the three. He had no competition. Up to the time of the investigation of the cattle-plague, the other tar-alcohols were supposed not to be antiseptic at all. When Mr. Crookes, and Dr. Smith, and others, took the matter in hand, they had no desire to damage Mr. Calvert's commercial prospects; but were finally compelled to admit that the phenyl-alcohol had no exclusive virtues. In his first report, Mr. Crookes says that the cresyl-alcohol has been supposed to have no antiseptic properties whatever, but that it seems to be nearly if not quite equal to the crystallized preparation. This remark led me to look into the subject; and some experiments convinced me that the cresyl-alcohol is far more efficient than the phenyl. Mr Parkes says that the impure acid, that is, the whole group together, is better for all purposes to which he has applied it, than are the crystals. Indeed, the whole group as found combined in the old-fashioned creasote, the ordinary creasote of the market, is the thing after all. Its efficiency has never been excelled by any of the separated "acids," and the result of their separation is merely to enhance the cost. As I before remarked, this whole matter of the antiseptic treatment of wounds has been too much complicated. Simple watery solutions would probably produce quite as good an effect as these putties, plasters, lac, etc. With regard

to burns, I can claim to speak from experience. A watery solution of creasote, of the strength of about one-half of one per cent., or the creasote-water of the pharmacopœia diluted about one-half, applied on a single thickness of old pocket-handkerchief, will allay the pain of a burn sooner than any thing else. Thus diluted it is a most valuable local anæsthetic. Under this dressing, a burn of the first degree will usually heal without suppuration. One of the second or the third degree will not; nor will it under Mr. Lister's applications. The septic-germ theory of Pasteur, though now commonly accepted in a general way, cannot be made responsible for all the evils of suppuration without grave mistake.

Dr. Jacobi wished to inquire of Dr. Squibb what was the chemical or physical effect of the creasote, undiluted or in strong solution, on healthy tissue?

Dr Squibb: Its prominent characteristic is to coagulate albumen. A strong solution applied to the surface turns the epithelium white, by virtue of this property. The whiteness disappears after a time, and the epithelium becomes again transparent. But this transparency indicates no return to its normal condition. The albumen once coagulated, it is dead, and must peel off. Another curious effect is noticeable: if too strong a solution is applied to a burn, it does not appear to relieve the pain; I have repeatedly seen a one or two per cent. solution fail to give relief. The character of the pain produced by a strong solution is exactly like that of a burn; but in the behavior of the two there is this difference: If the part rendered painful by such an application be held up so as to drain it of blood, the pain is increased till it may become almost insupportable; if held down so as to allow the influx of blood, the pain is diminished; herein the pain is like that from chloroform, and is exactly opposed to that from a burn.

I might add that the reason why anatomical specimens are so often rendered opaque and unfit for microscopic examination, by being preserved in carbolic acid, is doubtless the too great strength of the solution employed. I suppose an aqueous solution of one-fourth of one per cent. of the cheap impure acid ought not to injure a delicate specimen. I have now in progress a series of experiments to determine this point, using solutions varying from one-tenth of one to one per cent., which last, I am convinced, is quite too strong. The best test of the proper strength of your solution is its application to the tongue. If it coagulates the albumen, producing an effect like that of hot tea or coffee, it is too strong.

Dr. Jacobi: I am glad to see, Mr. President, that the chemist agrees perfectly with what many of us have repeatedly seen. I have made the same observation with regard to the pain, and the effect of position upon it. I have felt, too, that, if the antiseptic treatment is to be of any use, it must be simpler than Mr. Lister has made it, for by his plan each patient requires five or ten times as much attendance as usual. I have myself used carbolic acid in a great number of instances, both upon living and upon dead tissue. A solution of one-tenth applied to croupous membrane will cause it to shrivel up in a very short time; and the very beneficial effect of the acid upon diphtheritic membranes is due to its coagulating power. But this very property leads me to think that solutions of one-fifth to one-twentieth applied to wounds, etc., as in Mr. Lister's practice, will have an effect just the reverse of what he intends. He wishes to preserve healthy tissue; I think I have often destroyed it by using a solution too strong. I know that a number of years ago, when I knew less about the subject than I do now, I very speedily destroyed the cornea in a case of diphtheritic conjunctivitis. I applied a very thin layer of a dilution of one part to eight or ten of glycerine and water to the conjunctiva; the cornea thus became slightly touched by it, and the result was that it was perforated much earlier than in the normal course of the disease. The diphtheritic affection might have caused perforation in thirty-six hours, while I had done it in five or six. I have seen the shrinking and destruction of healthy tissue immediately follow the use of strong solutions; and I agree with Dr. Squibb, that we have not yet reached the minimum of strength desirable. I now commonly employ a dilution of three or four grains to the ounce. I have used it to wash out the uterus in puerperal endometritis; and I am confident that in many cases of this kind, which have lately come under my hands, the patients have owed their lives to this treatment. In very bad cases, I have used intra-uterine injections of twenty grains to the ounce; but then I am careful to use very little of the injection, to throw it directly into the uterus, and immediately to wash out the vagina with a milder solution, to avoid the unpleasant effect which the stronger one would produce upon it. In cases of common catarrh of the external ear, which are often as obstinate as they are uncomfortable, I have employed a three or four-grain solution, and found them yield more speedily than to any thing else.

Dr. Chadsey had made use of carbolic acid from its first introduction, always in weak solutions, never stronger than one

part to forty. A severe burn of the second degree had healed without suppuration under a dressing of the acid covered with oiled silk. He had gained happy results in gunshot wounds, putrid sores, disease of the ear, leucorrhœa, and gonorrhœa. For the latter cases, glycerine rather than oil should be used as a solvent, to avoid staining the linen.

Dr. Smith wished to know whether tissue, whose albumen has been coagulated by any means whatever, could possibly retain its vitality; and if not, how such devitalized tissue was gotten rid in wounds subjected to Lister's treatment?

Dr. Weisse thought it was carried away by absorption, and that the results proved this.

Dr. Jacobi doubted whether albumen so coagulated would find any solvent in the fluids of the wound; and if not, then its absorption was impossible, for absorption could take place only after solution or fatty degeneration.

Dr. Griscom had given inhalations of carbolic-acid vapor in a case of abscess of the lung, with a happy effect.

Dr. Weisse, referring to the statement that Mr. Lister had come down from the use of the pure alcohol to that of a two-per-cent. solution, said that he would doubtles come lower yet, only he wished to feel his way carefully, without incurring in any case what he woud deem a risk to the patient. Mr. Lister by no means claimed that all suppuration was due to septic germs. He simply said that experience had taught him that you will limit suppuration in a wound if you prevent decomposition of its fluids.

Dr. Stein had made considerable use of the agent. He preferred tin-foil to protect the dressings, as it could be most nicely adapted to the surface. He had assisted in the removal of nearly the entire frontal bone, for necrosis supposed to be syphilitic, the soft parts having previously sloughed. The suppuration, which was excessive, was checked under the application of carbolic acid, and the wound healed very well. Iodide of potassium was freely given.

Dr. Chamberlain, attempting on one occasion to use what he believed to be the impure acid, had found it quite unmanageable, of about the thickness and color of dark molasses, nearly insoluble in water, and indelibly staining the vessel. He wished to know if he had obtained the right article.

Dr. Squibb: "That, sir, is not the 'impure' but the 'crude' carbolic acid. Nothing should ever be used for medical or surgical purposes which is not transparent, though it may be dark. The impure acid is made by redistilling the crude; it is

a combination of the three alcohols, and would much better be called creasote, for it is identical with the old-fashioned coal-tar creasote. A mistake often made is that of prescribing a solution, and getting this; and fearful accidents have occurred from its application pure to burns, etc. The safest mode is to dispense the crystals by measure. The impure acid is never wholly soluble in water, but it should leave merely a slight scum. The tar and oils are rendered more soluble by the addition of alkalies, an occasional adulteration."

"Having answered Dr. Chamberlain, I would say that Mr. Lister began at the wrong end, with the heroic style of treatment. I think it a very interesting question—what did become of the coagulated albumen sealed up by him in his early operations; for he used a large amount of the acid, dipped his finger into it, and smeared it all around inside the wound. If we could suppose pepsine to be introduced there, and a process of digestion to be set up, one might look for absorption. I think it most probable that the coagulated material, in such cases, becomes encysted, like other foreign bodies, for it is, to all intents, a foreign body. Mr. Lister's system illustrates what seems to be a strong tendency in human nature—to seek complication. I am constantly finding persons leave the simple solution I have recommended for burns, and go to ointments, etc., which are not only useless but hurtful."

The President: "I may say that, two years ago last October, I commenced to direct that the wood-work of all the lying-in wards of Bellevue Hospital should be daily dampened with a solution of the crystals, two grains to the ounce. I afterward replaced this by a cheaper preparation of about the same strength. We have since a great diminution in the mortality there; but I would not ascribe this to carbolic acid alone, for we are very careful in our hygiene. In addition, I always direct that every woman in the lying-in ward shall have her vagina thoroughly disinfected. I make it the duty of the interne to see that no woman has any smell of the lochia about her; and for that purpose we have used carbolic acid, Labarraque's solution, and the permanganate of potassa. The last I have now discarded, because the specimens furnished were found irritating, perhaps from some admixture of caustic potash. I am not prepared to say that the carbolic acid is preferable to the Labarraque. Moreover, whenever a woman's vagina is found difficult to disinfect—and we meet with such cases now and then—it is made the nurse's duty to have a large piece of rag, saturated in a solution of the acid, laid near the vagina.

We do not rely upon these means alone; when the floors are washed, a bottle of Labarraque's solution is added to the bucket of water; pans of chloride of lime are placed in the wards, and also shallow dishes of carbolic acid; the windows are kept open day and night, and the doors nearly all the time. It is certain that, by one or all of these means, we are getting clear of puerperal fever in that hospital.

"As to the manner in which carbolic acid checks suppuration, it at this moment occurs to me, as a matter worth investigating, whether it may not possibly so affect the capillaries of the part to which it is applied, as to prevent the lymph globules from escaping."

The Society then adjourned.

—*New York Medical Journal.*

MEDICAL SOCIETY OF COUNTY OF NEW YORK.

Stated Meeting, June 7, 1869.

Dr. GEO. T. ELLIOT, Jr., President, in the Chair.

The President announced the election of Dr Robert McNeil to membership.

Dr. Salvatore Caro read a paper upon *the Treatment of Summer Complaints by the Bromide of Potassium.**

Although the title of this paper comprises the entire range of diarrhœal diseases both of adult and infantile life, special reference was had to the diarrhœal diseases of infancy, cholera-infantum standing prominent in the list. The causes, symptoms, progress, and termination of this complaint were described at length, as well as, in a general way, the treatment which is usually considered orthodox in these cases. Then stating that an accidental success in the treatment of several cases, wherein he had administered the bromide for other purposes than to control the diarrhœa, had led him to more fully test the value of this remedy, the speaker narrated twenty cases which might be taken as types of the cases usually met with in practice, and which were selected from 163 recorded cases occurring under his own observation. We present herewith, from the *Record*, five of the cases in full:

III. John Sinott, 28 months old. I took charge of him on

* This paper is published in full in the *Medical Record* of July 1, 1869.

the 1st of August. For several days he had been suffering from vomiting and purulent discharges from the bowels. I prescribed aromatic syrup of rhubarb with laudanum, but without effect. On the 2d, I gave twenty drops every hour, of a mixture of ten grains of bromide of potassium, in an ounce of mucilage, with twenty minims of krameria. After a few doses the child slept, and upon awakening asked for bread and butter. Vomiting ceased. The flux of the bowels changed from purulent to yellow; and the 24 to 30 passages, every 24 hours, diminished to six. He became convalescent, and on the 8th was discharged.

IV. J. A. Criger, 20 months old; has twelve teeth. According to his mother's statement, he has never given trouble, eating and drinking whatever was offered him. On the 3d of August he fell from a chair, striking his buttock, apparently receiving no injury. During the night his bowels became loose, accompanied by a dirty-water-like substance. In the morning he had convulsions. During the afternoon I found him very comatose; pulse from 95 to 100; pupils dilated; hemiplegia of the right side; alvine discharges, from twelve to fourteen, every 24 hours, of a thin fetid matter. About every six hours, convulsions of ten minutes' duration, accompanied by vomiting. I prescribed revulsives to the lower extremities and arms; and, every two hours, twenty drops of a mixture of one drachm of bromide of potassium, in an ounce of mucilage. The motion of the bowels and vomiting ceased.

After a few days, as the comatose and hemiplegic condition continued, iodide of potassium brought matters right. On the 1st of November he had another fall, merely affecting his bowels by free motion; the bromide of potassium immediately stopped it.

V. John Balheimer, 13 months old; has six teeth; is fed by the bottle. On the 15th of August I saw the child for the first time. He had been suffering for 14 days from inflammatory dysentery, having passages of a purulent and bloody nature, from 20 to 24, every 24 hours. His thirst was intense; he vomited every fluid offered him. The eyes were sunken, pupils dilated, skin corrugated and spotted blue, body cold, tongue red and dry, pulse imperceptible; no urine. In addition to this, he had bronchitis, with severe cough. I prescribed 1 scruple of bromide of potassium, in an ounce of mucilage, with ½ drachm of tincture of krameria, 20 drops every two hours. The passages decreasd. On the 16th day of his sickness, and the second under my care, he was able to eat and sleep. His passages were only 4 in 24 hours, and of a healthy appearance.

In order to allay the bronchial cough, I prescribed 10 drops of fluid extract of poppy, to be taken every two hours. On the 1st of September, he was discharged. A few days later he had a relapse, and on account of distance was placed under the care of a homœopathist, and died.

On the 15th, an elder brother was brought to me suffering in a similar manner from dysentery. The disease was immediately checked by the bromide of potassium.

X. J. McEvoy, 12½ years old: a healthy boy, attending school. August 13th, having eaten a bellyful of green apples, he was seized with cramps in the belly and legs, colic pains, vomiting, and loose bowels. For 48 hours his parents doctored him with castor-oil, paregoric, cholera drops, mustard baths, etc., etc., but without giving relief. I was sent for on the 15th, the third day of his sickness. I found him with eyes sunken, skin cold and corrugated, extremeties bluish, which upon being touched would leave the white impress of the fingers for more than 25 seconds. The abdomen was almost struck to the vertebral column; breath hurried and hot; tongue pale; voice scarcely audible. The boy was shivering with cold, although covered with mustard plasters, blankets, etc., and in an exceedingly hot, low-ceilinged room on the top floor. His thirst was intense. The drinks given him were, rice-water, beef-tea, brandy-and-water, ice-water, milk-whey, etc. No sooner taken than ejected indiscriminately, both up and down, almost in their natural state. I thought this case almost hopeless, but, trusting to the efficacy of the bromide of potassium, I prescribed ½ drachm in an ounce of water a teaspoonful every two hours; also a flaxseed meal poultice over the abdomen. The second dose caused great reaction, stopping the vomiting and flux of the bowels, and the boy fell asleep. The next morning I found him in his hot unhealthy room, laughing and well.

I have had 25 similar cases, ranging from 12 to 46 years of age.

XIV. J. Higgins, a healthy infant, deprived of the breast from his mother's dying seven days after confinement. When only three days old he began to suffer from retention or meconium. All nourishment was ejected with great force, even the breast milk of a woman confined five days before his birth. The stomach, from the irritating action of the meconium, could not retain either medicine or food, nor could the bowels be moved. Ten grains of the bromide of potassium in an ounce of orange-flower water, ten drops every hour, put a stop to all disagreeable symptoms; the baby slept, its bowels moved, and,

after the discharge of the meconium, it commenced to nourish from the bottle without any further disagreeable results.

I had three similar cases, not owing to the mothers' death, but the infants being deprived of the maternal nourishment from other causes.

The paper concluded as follows:

Now let us speak on the merits of the drug. Taking for granted that, in matters of fact, in medicine particularly, we can judge better *a posteriori* than *a priori*, I submit my cases and conclusions to this enlightened body. Not accepting the doctrine of some of the modern writers, that the intestinal flux is a symptom of some inflammatory affection, but adopting the opinion of the celebrated Capuron, that infancy being naturally the age of nervous sensitiveness, susceptible to internal and external impressions, easily irritated or calmed, and judging from several other cases besides those just read, I think that, in its beginning, summer-complaint arises from an over-excitement of the nervous and vascular systems, and that therefore the bromide of potassium affects it, and acts as a sure cure.

I cannot better explain the action of the bromide of potassium on the system, than by quoting the words of Headland, found on page 272 of his work, "*On the Action of Medicines*," "The bromide of potassium, a medicine of the mineral kingdom, has been much recommended lately for its power of producing sleep; it is, however not a true soporific, but rather a general sedative. As far as my experience goes, it acts by allaying irritability of the brain, spinal cord, and sexual system, and thus may indirectly cause sleep." And on page 283,—"The bromide of potassium, a remedy of recent introduction, is exceptional among nerve medicines as, belonging to the mineral instead of the vegetable kingdom. It quiets the nervous system generally, allays pain, promotes sleep, and subdues a morbid irritability of cutaneous or mucous surfaces, by its influence over functional disorders of the nervous centres. It is only indirectly soporific, as far at least as I have been able to judge." Mr. Gubler considers the bromide of potassium a general sedative to the nervous system, allaying irritability of the mucous membranes, and at the fauces and genital passages especially. He thinks it hypnotic, causing sleep by its sedative action on the whole nervous system. M. Vigouroux thinks it acts by diminishing vascularity of the great nervous centre. It is therefore the remedy, *par excellence*, for the nervous complaints that are common in large cities.—(*L'Union Medicale*, 1864.)

I have never discovered any unpleasant effects produced by

the use of the bromide of potassium, and have always found it to answer my purposes. If locally applied, it reduçes the excessive heat found in the mouth of the baby, caused by the inflamed condition of the gums. On introducing the thermometer into the mouth or anus of the baby, I have seen the temperature fall four or five degrees. The drug is an anæsthetic to the nerves of the mucous membrane of the alimentary canal from the mouth to the rectum, of the urethra, the conjunctiva, and the nares. It is also a diuretic. In cases where the urine has not been voided for 24 hours, after the first dose of the bromide it is freely passed; the skin commences to feel warm, and becomes covered with a gentle perspiration, removing uræmic symptoms, causing general reaction, and invariably the decrease of the intestinal flux, and an absolute cessation of vomiting.

The medicine being almost tasteless, and of no bulk, it is easily taken by the most fastidious and troublesome child. I generally prescribe from 10 to 30 grains in an ounce of vehicle, either mucilage or orange-flower water, for their pleasant taste; the dose being 10 to 30 drops every hour or two, varying according to the age of the patient, and the acuteness of the case. I seldom use astringents with it; but, if required, I select the tincture of krameria, as less disgusting than kino and others. For local application, I mix the salt with mel rosarum, generally using one scruple of the first to an ounce of the latter, permitting the mother to rub it on the gums with her finger *ad libitum*. When used in large doses, I have not found very satisfactory results from the bromide of potassium; but I always succeeded with minute doses.

You will observe that, of the cases I have just reported, only three died, and the fatal result in these was due not to the bowel complaint, but to other causes. I had also four cases which I purposely and obstinately treated according to the generally-adopted system. To my regret I must confess, that but one, after a severe and hard struggle, recovered; the other three died.

Dr. Calkins deemed hot-water and hot-vapor baths invaluable auxiliaries in the treatment of the bowel complaints of children, and related a fatal case, which he thought had suffered from their omission.

Dr. Garrish had found the bromide fail to control the nausea and vomiting of pregnancy, and asked Dr. Caro's experience.

Dr. Caro had not used the drug in pregnancy, as he had gained the impression, from something in his reading, that it was emmenagogue, and might do harm. He had found it im-

mediately arrest the vomiting in the case of a woman with Bright's disease, who had, for three or four weeks, been unable to retain food. It had stopped the nausea and vomiting in a case of typhoid double pneumonia.

Dr. Chadsey had been using the bromide quite freely, for the last three months, in affections of the stomach and bowels. It had happily relieved the only case of cholera-infantum he had chanced to have in at that time. In a case of vomiting, in the commencement of pregnancy, which nothing else would check, it had been promptly effective, and no bad results had followed—indeed, none had been anticipated. A druggist, having a very large prescription business, had said that the consumption of the bromide had quadrupled within a short time, and that it was now greater than that of the iodide, which it was replacing in many instances.

The President was asked whether he considered the bromide an emmenagogue. He replied that he had used it in many cases of pregnancy, as well to control the nausea and vomiting as for other indications, and his experience was that it had no emmenagogue action whatever. He was in the habit of employing it freely, and in large doses, in dysmenorrhœa, to gain its sedative effect, and he had never seen it increase the flow. He could not, therefore, think we were justified in refraining from its use on account of the pregnant condition. He had not found it so satisfactory a remedy in the nausea and vomiting of pregnancy as to lead him to give it the first rank; but neither did he know any other remedy to which this could be assigned. In the treatment of such a symptomatic disorder we must expect failure. It was trying to remove the effects of the thorn in the flesh, without removing the thorn. Among the articles that had lately appeared, commending the bromide in the various forms of nausea, was one by Dr. Storer, of Boston, showing that it counteracted the nauseating effects of ether.

With regard to the class of cases related by Dr. Caro, Dr. Elliot yielded entirely to him in experience, and could speak, from personal knowledge, of his accuracy of observation and record. His testimony was of such value that it would probably more or less shape the practice of his hearers this summer. In the case of a rachitic little child, suffering from whooping-cough and bronchial catarrh, with a good deal of diarrhœa, refusing nourishment, and lying on the bed, with hot skin, restless and fretful, Dr. E. had given the bromide alone, and its effect was delightful. It had produced like results in one or two other cases equally unpromising.

As to the extended use of the salt, Dr. Chadsey was certainly right. Probably every druggist was now selling much more than four times as much of it as a few years ago. For his own part, while prescribing it much more frequently than before, it was not so lately that Dr. E. had been awakened to its value. Fourteen years ago it was his favorite remedy in spasmodic croup, and bronchial catarrh, with irritation of the respiratory passages. Having about that time a troublesome case of spasmodic croup, he had at last given the mother the prescription, labelled "Preventive for croup," to be used whenever she saw an attack coming on. On her return from Europe, the lady said it had worked so well that she had given the prescription to some sixty families.

The hypnotic action of the bromide was so well known as to need no comment. The danger was, now, that too many of the public would acquire the habit of taking it, as a regular thing, to procure a quiet night's sleep. Dr. E. believed that a gentleman of this city had lost his life from its excessive and habitual use. A prescription given to secure sleep, this man had kept and had renewed, again, and again, until he used to lie half the day in a state of languor. Coming under the speaker's care, his habit was discovered, and finally given up; but not before it had produced the prostration which was probably the cause of his death.

Dr. Caro, in response to questions, said that he had commonly given the small doses—¼ of a grain to 3 grains—mentioned in his record of cases; and that he had never, save in a single instance, given a dose larger than 8 grains. He had seen no eruption follow, except in one case, and there he thought it not attributable to the bromide.

Dr. Kennedy thought the dose of the drug might be considered very indefinite. He had himself taken a large amount of it last winter, for an obscure trouble in the head and pain in the shoulders—the doctors were undecided about the diagnosis, but agreed in recommending the bromide. He had begun with a solution of 2 drachms of the salt to 4 ounces of water, a teaspoonful every three or four hours. This dose he increased till he was taking 2 and 4 drachms of the salt daily. Then he bought ½ a pound of it and made a saturated solution, of which he took at first a teaspoonful, and afterward a tablespoonful, four times a day; and he might have taken more without injury. It gave a very pleasant night's rest, and a delightful feeling of languor and lassitude, which was continued for days and weeks. He had observed the eruption; also that the medicine disturbed

the bowels and stimulated the kidneys; but, in his own case, it did not at all disturb the stomach, simply producing an agreeable sense of warmth. He believed that, where the nervous system is irritated, from whatever cause, and it becomes necessary to soothe either body or mind, the bromide is an excellent remedy. He would recommend it to be taken freely in such cases, and especially by rum-drinkers.

The President stated that a saturated solution in water was one part to four.

Dr. Farnham referred to the cases reported by Dr. Hammond, where the bromide, in large doses, had produced insanity.

The President had once given ½ an ounce in the course of one night, in a bad case of delirium tremens. The morning came, and it had produced no perceptible effect; but a shower-bath on the head and neck put the patient to sleep in a couple of hours. He would hardly give such a dose again; for, although some persons might bear it well, there was undoubted testimony to its evil effects on others. We should remember the fate of Fountain, who to prove his views of the harmlessness of chlorate of potassa, took the dose which killed him.

Dr. Howard had used 10 grain doses, every two hours, with great benefit, in cases of sick headache.—*N. Y. Med. Jour.*

Proceedings of Societies.

CHICAGO MEDICAL SOCIETY.

FRIDAY EVENING, *Sept. 3, 1869.*

The regular semi-monthly meeting of this Society was called to order, President R. G. Bogue in the Chair.

The Secretary read the minutes of the last meeting, which were duly approved.

In the regular order of business, the name of Dr. C. J. Lewis, was proposed for membership, by Drs. Ingalls and Wanzer.

Dr. Bogue, as Chairman of Committee to draft resolutions in case of the death of Dr. F. O. Earle, presented and read said resolutions, which were accepted by the Society with the pro-

vision, that the resolutions be published in the city papers, and a copy be furnished the family of the deceased.

The discussion of the "Pathology and Treatment of Hæmoptysis," was opened by Dr. Hurd, who gave a detailed and interesting account of the symptoms connected with hemorrhage from the lungs. Thinks if there was clotted blood in the lungs there would be dulness on percussion, but *post mortems* generally show that the blood is infiltrated into the lobules. Is of the opinion, that in the majority of cases there is no special lesion of the coats of the artery, but where from tuberculous deposit it comes from the vessel itself and not from transudation. Considers hemorrhage merely a symptom that generally occurs before the softening stage, the tubercle acting as a foreign and irritating body. Thinks there is less heart disease in cases of hæmoptysis than Trousseau would have us believe. Carcinoma of the lungs may also be a cause as well as thoracic aneurism, pneumonia, and gangrene of the lungs.

Thinks the only thing we are apt to confound it with is *hæmatemesis*, although in this condition the blood vomited is blackened and decomposed. If the blood only tinges the sputa, it may come from the pharynx. Also spoke of the occasional occurrence of vicarious menstruation which might be the cause of the hemorrhage.

He considers the prognosis very bad, as it is generally due to tubercle. Treatment, gives plumbi acets and opii frequently; and Aitken recommends potassa bitart. ℥j.; P. opii gr. j., given often and continued for forty-eight hours. If there is labored action of the heart, arterial sedatives. The French use leeches to chest. He also spoke of Warren's styptic —sulphuric acid dropped into alcohol, and a sol. ferri per sulphates, but he did not like the action of the last-named remedy.

If the hæmoptysis be due to vicarious menstruation, then determine the blood to the uterus; recommends argenti nitras to be applied to the os uteri.

Dr. Marguerat thinks there is no disease more trying to the physician. As regards the prognosis. Says there is great

diversity of opinion, some contending that nine-tenths, while others not more than one-half of the cases of hæmoptysis are due to tuberculosis. Says he saw one case where there was no signs of tubercle. Of the treatment, Dr. M. considers the French too heroic, as they bleed too much. Says if we adopt the theory that many cases are not due to phthisis, but congestion, we should bleed. Says Dr. Watson leeches in these cases. has not much confidence in medicine to relieve the hemorrhage, but depends more on quiet, cooling drinks, and good fresh air. Says he has never had a case of fatal hæmoptysis, and that Dr. Flint says he has never seen a case of vicarious menstruation in his whole practice, hence is of the opinion that it is of rare occurrence.

The Doctor referred to the case of a young man whom he was called to see, a few weeks since. It was at night, and when he arrived he found that the patient had spit up two or three teaspoonsful of blood. Could detect no signs of phthisis at the time, but nevertheless the young man died of phthisis in two weeks.

Has at present a young lady under his care, who suffers from hæmoptysis. The lady is fleshy and rosy, and does not look at all like a tuberculous subject, but nevertheless ascultations reveals metallic tinkling over a small spot posteriorly.

Dr. Frediegke thinks we are apt to find many of these patients plethoric, and, in such cases, thinks that veratrum viride, in full doses, accompanied by astringents, may be found very beneficial.

Dr. Paoli remarked, that we have to be very careful in our decision, for tubercle may exist in the lung, while the tissue external to the deposit may be healthy; hence, percussion is clear, and ascultation good, *post mortem* only revealing the presence of tubercle.

The Dr. further said, that the distinction between hæmoptysis and hæmatemesis was, that in the former, the pulse was hurried and excited, while in the latter it is slower, and the face is congested. Cited a case which he saw in Small-Pox Hospital, some 12 years ago. Patient suffering from cirrhosis of the

liver, when there was hæmoptysis to the amount of 12 ounces. Lungs dull on percussion. On *post mortem*, there was found to be, in addition to the cirrhosis of the liver, calculi of the ducts; while the hemorrhage seemed to have been entirely from the larynx.

Of the treatment: does not recommend bleeding, in the asthenic cases. Thinks gallic acid, in 10 or 12-gr. doses, every half hour, far preferable to the opii and plumbi acetatis, as it does not tend to constipate the bowels. The pulse may be diminished by digitalis, keeping patient quiet, and administering cool drinks. Says he has never seen a case die, but admits there are no cases more perplexing and alarming to the physician than those of hæmoptysis.

Dr. Fitch said, his experience had not been very great, but the majority of cases of hæmoptysis that had come under his observation had resulted in tuberculosis. Had never treated a case of hæmoptysis in a plethoric subject, but if he were called in such a case, he should not hesitate to bleed. The usual treatment employed by him consists in elevating the shoulders; ice to chest; gallic, or tannic acid, or lead and opium internally; and, in some cases, has seen great benefit derived from ergot, with sinapisms to the extremities and acidulated cold drinks.

Dr. Merriman remarked, that his experience had, also, been quite limited, but that he had seen several cases of great interest. Was called one night last winter to see a man who was bleeding from the lungs; but, when he arrived, found the patient dead. Patient had complained of a feeling of oppression in the chest, followed by a copious gush of blood over the side of the bed. This was a tuberculous patient.

Another was in the case of a rosy-cheeked, plethoric young lady, who was dressing to go to a party, when she was suddenly attacked with bleeding from the lungs. Dr. says he was in the next house, and was summoned immediately. When he arrived, found the woman's garments and bed saturated with blood, the woman having completely fainted away. Judges the amount of blood lost to be from 12 to 16 ounces.

In a week, she had another attack, and lost 6 or 8 ounces of blood, and continued to have them for six or eight weeks, losing from 2 to 8 ounces each time. The hemorrhage occurred about three years ago, and the lady is now married, the mother of a fine healthy baby, and in perfect health herself. The treatment in this case consisted in the administration of plumbi acetatis, and opii, and sulphuric acid and iron, latterly, with good hygienic treatment.

The discussion was also participated in by Drs. Hutchinson, Bridge, and others. The President announcing the discussion closed.

The committee ordered to draft resolutions, in case of the death of Dr. D. D. Waite, consisting of Drs. Davis, Loverin, and Paoli, rendered the same, which was read before the Society, and accepted, with the provision that the resolutions be published in the city papers, and a copy of the same be furnished the family of the deceased.

Dr. Davis remarked, that he had known Dr. Waite a good many years, and spoke in the highest terms concerning his ability and character. Said that while Dr. Waite was President of the Chicago Medical Society, it was never more prosperous; and that it was due to the energy of their President, who left it in a more flourishing condition than it had been for yeaas. Dr. D. further remarked, that owing to Dr. Waite's ill health, we have not seen much of him of late years, but the older members of the Society will remember him as one of their most attentive members, and earnest, hard workers.

Dr. Paoli also made equally complimentary remarks.

Dr. Marguerat said, that the last time he saw Dr. Waite was about one year and a-half since, when he saie to Dr. M.: "Tell my friends in the Society that I am with them, if not in person, in heart and soul."

Dr. Loverin also made complimentary remarks.

The Society then proceeded to miscellaneous business.

Book Notices.

The Structural Lesions of the Skin, their Pathology and Treatment. Illustrated. By Howard F. Damon, A.M., M.D; Fellow Mass. Med. Soc.; Secretary Boston Obst. Soc.; Admitting Physician to the Boston City Hospital, and Physician to Department for Treatment of Skin Diseases among Out-Patients; Author of Photographs of Skin Diseases, The Neurosis of the Skin, etc., etc. Philadelphia: J. B. Lippincott & Co. 1869. Pp. 255; 8vo.

Almost every author upon skin diseases has seemed to find it necessary to invent a new system of classificatiom. Not to mention those of the two preceding generations, when the science had fairly to be founded, we have, at the present day, the widely different classification of Hebra, Devergie, Hardy, Cazenave, Wilson, and Buchanan; all eminent men, while others scarcely less eminent have introduced noted modifications into those systems which they have adopted as their basis.

Dr. Damon also claims "a new system of classification, based" as he says, "upon anatomical, physiological, and pathological data." "All skin diseases" he remarks, "may be separately included under one or more of the following causes:—secretion, nutrition, and structure,"—and thus he obtains the following classification:—

Class I.—Neurosis.
" II.—Functional Diseases of Cutaneous Glands.
" III.—Inflammation of the Skin.
" IV.—Structural Lesions of the Skin.

This awakens a shadowy recollection, as though familiar. We find Rayer's classification of 1835 to be—

Class I.—Inflammatory Affections.
" II.—Non-inflammatory Affections.
" III.—Diseases of the Secreting Functions.
" IV.—Neurosis.
" V.—Faulty Structure, or Unusual State of one or

other of the Elementary Components of the Skin.

" VI.—Degenerations.

Now, if we omit the second of these as supernumerary, and condense the fifth and sixth into one, with a name which shall express their common character—say structural lesions—there results a classification, not merely similar, but identical with the one proposed by Dr. Damon. Although possessing hardly as much originality as the author claims, the classification is a good one, and a decided improvement on Rayer's.

Dr. Damon very naturally divides "structural lesions" into hypertrophies, atrophies, and pathological new formations (nutrition increased, diminished, or perverted). Comparing his with Hebra's similar divisions, we find that he has transferred to pathological new formations, lupus and elephantiasis arabum, the one from Hebra's "Chronic Exudata;" and the other from his hypertrophies. These changes seem very reasonable to us, in view of the recent investigations in the pathology of these diseases. On the other hand, callus, molluscum, and condyloma are transferred to hypertrophies, while the important subject of cicatrices is entirely omitted.

In his introduction, Dr. Damon has shown the scope of the work, and given brief notices of the more important lesions, with reasons for certain new views, so that a student will undertake the work understandingly.

The various hypertrophies are treated in a condensed way, most of them being passed by with few words.

The author recommends careful study of the position and form of callosities, as from them "it is quite possible, in many instances, to identify a person as belonging to a certain trade," and "it may be the subject of medico-legal evidence, in cases of doubtful identity."

Pigment excesses receive more attention than the other hypertrophies. From facts presented by other observers, Dr. Damon draws the conclusion, "that the deposition of pigment in the skin, under certain physiological and morbid conditions of the economy, depends upon the influence of the ganglionic

nervous system." So far as presented, the data certainly seem to indicate this generalization. He does not bring this view forward as a new theory, but claims simply more or less to demonstrate what has hitherto been merely assertion. The article in this connection on Addison's disease, giving generalizations from 202 cases, is very interesting.

22 pages suffice for atrophies.

Pathological new formations derives its chief interest from the articles on elephantiasis arabum and elephantiasis græcorum, which give in small compass the latest views upon these subjects. The descriptions of both diseases are lucid, and while showing resemblances, show, at the same time, obvious differences existing between them, both in appearance and in pathology. Dr. Damon regards "the origin and seat" of E. arabum to be "in the lymphatic vessels and glands of the affected extremity." The disturbance in these glands causes an interruption to the passage of lymph, and the subsequent phenomena." He quotes very concisely the opinions of Rasmussen and M. Mestre upon this disease, and agrees with the latter when he says: "two predispositions are necessary, in order that elephantiasis may become developed—one due to climateric action, and the other dependent on an idiosyncracy of the individuals."

The symptoms and appearance of E. græcorum, Dr. Damon thinks, receive the most satisfactory explanation from the lesions found in the central nervous system, for the knowledge of which we are indebted to the investigations of Danielssen and Boeck. He regards it as hereditary, but not contagious, and thinks the light thrown on the therapeutics of diseases of the cerebro-spinal system, by the recent experiments of Brown-Séquard, will enable us to treat the disease understandingly, and with hope of benefit.

The work closes with a history of human horns, from A.D. 1590 to A.D. 1869, and a biography, which shows how extensive have been the researches of the author.

We commend the book to all interested in these subjects, as an honest exposition of the best views. The style is clear and

beautifully concise. The publishers have done their part, also, to make the book a credit to any library. The beautiful paper, clear type, and wide margin give the eye satisfaction in its perusal.

We shall look with interest for the succeeding works.

H.P.M.

The Membrana Tympani in Health and Disease. Illustrated by 24 chromo-lithographs. Clinical Contributions to the Diagnosis and Treatment of Diseases of the Ear, with Supplement. By Dr. ADAM POLITZER, of the University of Vienna. Translated by A. MATHEWSON, M.D., and H. G. NEWTON, M.D., Assistant-Surgeons of the Brooklyn Eye and Ear Hospital; Members of the Amer. Ophthalmological and Otol. Society. New York: WM. WOOD & Co., 61 Walker Street 1869.

This is a volume of 183 pages, octavo, neatly bound, printed on good type and paper, with beautiful illustrations. The subject of which it treats is a very important one, yet but little understood by the general practitioner. We commend the work as one of real practical value. Price $2.50.

The Science and Art of Surgery; being a Treatise on Surgical Injuries, Diseases, and Operations. By JOHN ERIC ERICHSEN, Senior Surgeon to University College Hospital, and Holme Professor of Clinical Surgery in University College, London. From the fifth enlarged and carefully revised London edition. Illustrated with 630 engravings on wood. With additions. By JOHN ASHHURST, JR., A.M., M.D., Vice-President of the Philadelphia Pathological Society; Fellow of the College of Physicians; Member of the Academy of Natural Sciences; Surgeon to the Episcopal Hospital, etc., etc. Philadelphia: HENRY C. LEA. 1869.

This is a large-sized octavo volume of 1228 printed pages; and, as its title-page imports, it is a thoroughly revised and enlarged edition of Erichsen's well-known work on surgery. The high reptutation gained by former editions will be increased

by this. It is a good, practical work, both for study and reference. Price, bound in cloth $7.50, in sheep $8.50. For sale by S. C. Griggs & Co., 117 and 119 State Street, Chicago.

A Guide-Book of Florida and the South, for Tourists, Invalids, and Emigrants, with a Map of the St. John River. By Daniel G. Brinton, A.M., M.D. Philadelphia: George MacLean, 719 Sansom Street. 1869.

This is a duodecimo volume of 136 pages, written in a pleasant style, and presenting a great variety of very valuable information, for the use of such as desire to visit the South, and especially Florida. It is also a very useful volume for physicians who wish to be prepared to give proper directions to such of their patients as may wish to resort to Florida, for the improvement of health. Aside from a slight commendation of the use of alcoholic liquors, in the last section, that we wish the author had omitted, we freely recommend the work, both to the profession and the public. Price $1.

Editorial.

Female Students and Physicians.—A recent letter from a correspondent in Europe closes with the following report from the *Gazette de Hospiteau:*—"Decidedly, the medical profession in France can no longer be considered the exclusive property of the male sex. Among the students who have passed the most brilliantly their examinations to the Faculty of Medicine are included three ladies—one French, one Russian, and one American. The latter has proved herself to possess a solid knowledge of anatomy, and dissections, pathology, and operative surgery."

It thus appears, that female students have not only gained admittance to the best hospitals and medical schools of Europe, for instruction, but they have finally been admitted to regular examinations and graduation, by the highest medical tribunal in France.

Is it not time that the position of female medical students should be more definitely settled in this country? At present, they are admitted freely to clinical instruction in the hospitals of most of our large cities, but are denied admission into the colleges, or to become regular candidates for graduation. If, in despite of the latter obstacle, one of them persists, until she finally gets a degree, from some school in this country or Europe, she is freely recognized in practice, and consulted with by members of the profession of the highest standing; and if she can get a hospital or infirmary for the treatment of women and children started, any number of respectable physicians are ready to lend their names to make up the usual list of *consulting* physicians, surgeons, obstetricians, etc. Now, if it is right thus to admit them to clinical instruction, in hospitals, consult with them in private practice, and associate our names with theirs, as attendants on public institutions, where is the consistency or propriety of shutting them out of the colleges? Certainly, there is no more indelicacy in mingling the sexes in the lecture room of a college than around the operating table of a public hospital. We are not disposed to encourage women to study medicine, simply because its practice is not a business suited to her nature, or which she can follow successfully, without ignoring some of the most important objects of her own creation. To do the work of a general practitioner, she must be ready in the darkness of night, as well as at noonday; in storm as well as sunshine—at all hours, to ride over the country, or traverse the streets or alleys of cities, all of which she cannot do without stultifying her own social instincts, and avoiding the performing of some of the highest duties required of her by her Creator. And, yet, it is doubtless true, that there is now, and always will be, a very few females who are so constituted, mentally and physically, that they will exhibit a persistent disposition to study and practise medicine. These, if well educated, could be made very useful members of the profession, and find honorable and remunerative employment in the practise of special departments of the profession, in our more populous cities. Hence, we think, it would be much better, if the

medical colleges should open their doors to them, and give them the same opportunities, and hold them to the same full requirements as the other sex.

Chicago Medical College—Medical Department of the North-Western University.—The next annual course of instruction in this institution commences on Monday, the 4th day of October. The general introductory lecture will be given in the College Hall, on Monday evening, by H. W. Boyd, M.D., Professor of Descriptive Anatomy.

We feel no hesitation in saying, that the student of medicine, who is earnestly desirous of thoroughly educating himself in all the departments of medical science and practise, can find no college in this country more complete in its arrangements, more comprehensive in its curriculum, or more reliable in the faithful execution of what it promises, than this. There is already a good class attending the clinical instruction in Mercy Hospital, the new building for which is rapidly approaching completion.

Archives de Physiologie Normale et Pathologique. Publiees par MM. Brown-Sequard, Charcot, Vulpian.—The number of this very valuable French journal for September and October is promptly on table. Its contents are varied and highly interesting.

Pharmacist.—We have received the September number of the *Pharmacist and Chemical Record* of this city, containing the proceedings of the recent National Pharmaceutical Convention, but too late to enable us to notice its contents in this number. We were absent from the city during the sessions of the Convention, or we should have been happy to have personally witnessed its proceedings.

Canadian Medical Association.—The second annual session of this Association was recently held in Toronto. We enjoyed the pleasure of attending its sessions, and forming the personal acquaintance of many of its members. We had prepared an abstract of such part of its proceedings as would interest our readers, but want of space will compel us to postpone its insertion until our next number.

Mortality for the Month of August, 1869:—

Accident, drowned	14	Dysentery	38	Meningitis, tubercular,	2
" burns, kerosene	4	" chronic	1	Manslaughter	3
" by fall	4	" typhoid	2	Neuralgia	1
" railroad	3	Encephalitis	5	Old age	6
" run over by wagon	2	Endo-carditis	1	Otitis	1
Anasarca	1	Entero-colitis	5	Paralysis	4
" and fever scarlet	1	Enteritis	12	Peritonitis	3
Apoplexy	4	Epilepsy	1	" puerperal	3
Ascitis and enlargement of liver	1	Exhaustion	1	Phrenitis	1
Asthma	2	Erysipelas	1	Pleurisy	3
" and consumption	1	Fever, congestive	1	Pneumonia	9
Births, premature	26	" puerperal	7	" typhoid	1
" still	47	" scarlet	53	Poisoned, unknown	1
" tedious	2	" malignant,	3	Pyæmia	1
Bowels, inflammation,	4	" typhoid	19	" from complicat'd fracture of leg	1
Brain, congestion of	8	" typhus	2	Rheumatism, cardiac	1
" compression of,	1	Gastritis	3	Scrofula	3
" disease of	3	Gastro-enteritis	4	" of hip joint and gastritis	1
" inflammation	6	Hemorrhage, internal,	1	" of intestines	1
" malformation	1	Heart, disease of	3	Small-pox	1
" softening of	1	" organic disease of	1	Septæmia	1
Cachexia, malarial	1	" valvular "	2	Spine, fracture of	1
Cancer of superior maxillary bone	1	" fatty degeneration of	1	Syphilis	1
Childbirth	1	Hemiplegia	2	Stomach, cancer of	2
Cholera infantum	328	Hepatitis, acute	2	" hemorrhage of	1
Cholera morbus	7	Hernia, umbilical	1	" scirrhosis of	1
Convulsions	86	Hydrocephalus	17	Sun-stroke	3
Consumption	40	" acute	7	Suicide	7
Convulsions, puerperal	5	Inanition	10	Tabes mesenterica,	39
Croup	8	" and diarrhœa	1	Teething	26
" diphtheretic	1	Intestinal obstructions	1	" and convulsions,	6
" membranous	2	Jaundice	1	Throat, ulcerated sore,	1
Cyanosis	1	Kidneys, Bright's dis.	1	" putrid sore	1
Debility	3	Liver, atrophy of	1	Uræmia	1
" general	1	" disease of	1	Vitality, deficient	1
Delirium tremens	1	" abscess of	1	Whooping-cough	24
Diarrhœa	81	" inflammation of,	1	" and teething	1
" chronic	4	Lungs, con estion of	2	Womb, contraction of,	1
" whooping-cough	2	Mouth, canker sore	1	" inflammation of,	1
Diphtheria	12	Measles	15	Wound to foot from fall	1
Dropsy	3	" and diarrhœa	1		
		" and teething	2		
		Meningitis	12		
		" cerebro-spinal,	7	Total	1070

COMPARISON.

Deaths in Aug., 1869, 1070 | Deaths in Aug., 1868, 945 | Increase, 125
Deaths in July, 1869, 815 | Increase, 255

AGES.

Under 1	488	30 to 40	45	80 to 90	2
1 to 3	313	40 to 50	31	90 to 100	1
3 to 5	44	50 to 50	21	Unknown	1
5 to 10	25	60 to 70	14		
10 to 20	24	70 to 80	8	Total,	1070
20 to 30	53				

Males, ----------548	Females, ----------522	Total, ---------1070
Single, ----------950	Married ----------120	Total, ---------1070
White, ----------1062	Colored, ---------- 8	Total, ---------1070

NATIVITY.

Austria----------	1	Denmark, ---------	2	Poland----------	1
Atlantic Ocean-----	3	England, ---------	8	Scotland, ---------	5
Bohemia, ---------	7	France,----------	1	Sweden, ----------	29
Bavaria ----------	1	Germany,---------	75	Wales----------	3
Canada, ----------	10	Holland ----------	5	Unknown, ---------	4
Chicago, Native,----	197	Ireland, ----------	41		
Chicago, Foreign,---	549	Italy----------	1	Total, ----------1070	
U. S., other parts,---	109	Norway, ---------	18		

MORTALITY BY WARDS FOR THE MONTH.

Wards.	Mortality.	Pop. in 1868.	One death in	Mortality.	
1---	16	9,094	568¼	Accidents,----------	27
2---	18	13,074	726⅓	Bridewell ----------	1
3---	39	15,076	384	County Hospital, ----------	21
4---	62	17,796	287	Home for Friendless, ----------	6
5---	95	16,033	168 7-9	Immigrants,----------	32
6---	64	13,083	204½	Jewish Hospital,----------	1
7---	104	25,492	245 1-9	Mercy Hospital, ----------	1
8---	103	15,813	153½	Marine Hospital,----------	2
9---	53	19,297	364 1-10	Manslaughter, ----------	3
10---	24	12,925	538½	Protestant Orphan Asylum, ----------	1
11---	29	14,340	494½	St. Joseph Orphan Asylum,----------	7
12---	135	17,485	129½	Poisoned, unknown ----------	1
13---	55	11,164	203	Convent of Good Shepards ----------	1
14---	62	14,839	239¼	Suicide, ----------	7
15---	58	21,078	363 3-7		
16---	42	15,465	368 1-5	Total,----------1070	

Resolutions of Respect upon the Death of Dr. F. O. Earle.— *Whereas*, the Chicago Medical Society has been deprived of one of its members, by the death of Dr. F. O. Earle.

Resolved, that we lament his loss. Although he had been with us but a brief time, we had learned to respect him for his gentlemanly deportment and professional ability. Although quite young in the profession, he had given promise of more than ordinary ability, and could look forward to a noble and useful future in the profession of his choice. We cannot but feel that the close application and devotion to the labor of the profession, during his stay among us, had much to do in determining his early death, which seemed too soon. The profession has lost an earnest worker. To his family and relatives we may be permitted to express our sincere sympathy.

Resolved, that a copy of these be sent to the family, and that they be published in the medical journals of this city, and in the *Medical Record* of New York.

R. G. Bogue, M.D.
T. D. Fitch, M.D.
A. H. Foster, M.D.

THE

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N. S. DAVIS, M.D., EDITOR.

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Original Contributions.

ARTICLE XXXIX.

INTRODUCTORY ADDRESS.

BY H. W. BOYD, M.D., Chicago.

LADIES AND GENTLEMEN:—I think I can read in your faces, as I see them before me, the story of a pleasant summer, whose brightness and bloom have given to you vigor and strength for the days which are before us. Many of you are called from far distant homes—some from the farm, and others from their merchandise; and we welcome you to this, the inauguration of the eleventh annual course of instruction in the Chicago Medical College. Since the last medical class passed from the guidance of the Faculty, important changes have been effected in connection with this institution; all of which are hoped to be but milestones of progress in her history. The Chicago Medical College has become the Medical Department of the North-Western University, a relation which it is believed will prove to the mutual advantage of all concerned; and having always entertained liberal views in regard to education, she has extended her liberality, so as to admit to her classes such females as may desire to pursue the study of medicine. This is an age of progress in almost every department of science or art. Philosophy is carrying her researches everywhere, mingling her lessons of wisdom with her lofty speculations. Science is continually unfolding

new glories, and adding new conquests to her long lists of triumphs, and at the same time is gradually, but surely, wending her way to the more perfect appreciation of the masses. And not only are the arts and sciences apparently advancing, but public education, societies for the promotion of knowledge, the spirit of invention and discovery, manufactures, and facilities for rapid communication and familiar intercourse, navigation, and all things useful and beautiful excite the attention of the world, and seem to prosper by the labors for their advancement. Large cities are built up in a day, and institutions of learning multiply rapidly. Only one hundred years ago, the first medical school was established in America; but to-day over forty are represented in our various cities, and a much greater ratio of increase can be ascribed to other schools and colleges. But a few years since, and the stage coach and the emigrant wagon were the principal means of transit from place to place; but to-day, long lines of railroads thread every state and county in the nation, uniting with their iron bands the Atlantic with the Pacific. But by the side of this progress there is a spirit of rash innovation, a seeming desire to blot out the past, the evident possession of wild, bewildering ideas, on almost every subject; a daring, restless inquisitiveness; a discontent; a disposition to hasten all events; to accomplish much in a very short time, and a reluctance to submit to that course of things which is favorable to calm meditation, and clear, steady thought. The evils of such a state of things are manifest in a thousand different forms, but nowhere more clearly than in the tendency to prevent thorough education. Our American people are too much of a money-loving people, they are too busy to think clearly and steadily, and investigate thoroughly and fully, and the result is, we have a paradise for quacks in education. Everything must be done in a day. Our schools and colleges, partaking of the spirit of our people, attempt to do too much in too short a space of time. An education cannot be procured in a month nor a year, but only by the slow process of *years* of labor. And to attain to *eminence* in any department of science or art, entails upon its votaries a degree of enthusiasm and de-

votion marked by self-denial and indomitable perseverance, and the end is obtained only in proportion as we have labored to obtain it. It is not only during your pupilage that you are expected to study. Those of you who have had preceptors, have just been receiving the initiatory instruction necessary to prepare you for the lectures, so that you can derive the best advantage from the knowledge communicated to you; and what you learn while you are here, in addition to that which you bring with you, will prepare your minds for the reception of more, and thus, as the bounds of your knowledge widen, as the field of your mental vision is extended, new beauties will appear on the distant horizon, and your desires will increase in proportion to your capacities for enjoyment, and the ends you have in view in seeking knowledge. And thus it must be through life. You should always be students, even after you have left the walls of this College, for then you have just begun to climb the hill of science, which is one of steep ascent. There is no railroad communication to its summit, by which passengers can be delivered at the other end of the track at so much a head; it cannot be reached by the aid of the steam car, and amid the confused rattle of machinery; neither can the lightning carry the rich products of those bright fields to the vale below upon magnetic wires; a tariff of prohibition hems its riches in, and it is only by the slow process of days and nights of toil and labor that the end can be obtained. There is but the one course, and no clipping off of corners or taking shorter roads. Every curve, corner, and stone of the pathway must be examined by him who would succeed. And although a process of toil, yet around the hopeful and persevering traveler to truth, thousands of joys are clustered. How his heart leaps at every step in the progress gained, and with what ecstacy he stands upon some jutting rock, which from below seemed an impassable barrier to his higher ascent, and at every resting place in his pilgrimage he discovers the sculptured monuments of those who have gone before him. Here are the trees and shrubs which they have planted, still blooming, and the rich fruits of their labors hang melting to his taste. All along up

the richest ores shine from the hillside; an emerald here and there lies embedded, and the pure diamond, like the radiance of the evening star, sparkles upon the vision. Upon the very thorns which pierce his feet, roses bloom, and from every jutting rock, plants shoot out redolent with the perfumes of Eden. Enthusiastic and persevering industry bring an indispensible requisite to success. It may not prove an unprofitable waste of time, to inquire at the starting point of the road which opens so invitingly its broad entrance before us, how we can best employ the future, so as to derive the greatest amount of good.

The Faculty of this College have adopted a course of instruction for which they claim peculiar merits, and its continued and increased success depends largely upon the vim and energy with which you pursue it. You must consider the fact that you are now entering upon the study of the most *noble* and *responsible* of all professions—one that requires men of the strictest honor and integrity, for to physicians are confided the secrets of families, sacred trusts, that are committed to no others. The high and noble motive of doing good to others, of relieving human suffering, and prolonging human life, is the only incentive that ever has, or ever will make the great physician. And if he has no nobler and higher motive than the mere gain that can be made by it, he is unfit to be trusted with the lives of human beings. How easy it is for the physician to control the destiny of his patients. In him they trust, and confide in his knowledge and TRUTH. He decides for them questions of life and death. Happiness or misery, it is his power to give. Because by devoted study, he has learned the mysteries and marvels of this wondrous machine, the human body. He has learned the anatomy of every part and organ, and of the laws which govern and regulate them, and of the dire results which follow their neglect or abrogation. He has also become acquainted with the proper mode of assisting nature to carrying out these laws, so that health can be secured and disease banished. The greater his knowledge the greater his power.

To enable you to contribute, in the highest degree, to the advancement of such holy and philanthropic purposes, it will be

necessary that the profession, through whose instrumentality you are to effect so much, should receive your daily and unwearied attention. Now ask yourselves the question, shall you prepare yourselves thoroughly? or shall selfish fear and desire for personal ease prevail, and prevent you from undergoing the labor necessary to qualify yourselves, to assume this fearful responsibility? These are important questions, and upon the answers given them depends the future standing of every medical student in this house. Do not delay to decide whether you will take a noble and elevated rank in your profession, or merely follow it as a trade. Determine now, at the commencement of this term of instruction, and that you will devote all your energies, and all your time, by closest application, to obtain a most perfect and minute knowledge of the elementary branches of your profession, for upon the accuracy and minuteness of your knowledge of these branches—the alphabet of your profession—rests all the superstructure, upon which you are to secure the monument of your future fame. Have it a broad and deep foundation, so that however high your fame may get, it cannot be shaken from its firm foundation. If you are deficient in these elementary branches—the only enduring basis for a permanent reputation—you will never obtain a distinguished position. You must, therefore, see the necessity of the closest application, even at the commencement of your career, for now is the period when these branches are taught. An attempt to gain a knowledge of the beautiful orations, and other compositions of the classic writers, in their classic tongue, without a knowledge of these languages, will fail. So in regard to your profession, the alphabet of which is: Anatomy, Physiology, Chemistry, Materia Medica, and Pathology. And when all these have been learned thoroughly, then you have a good foundation to build up a solid and enduring professional character.

The first great object of education is to discipline the mind, or train the mental faculties so that you have complete command over them. Our earliest knowledge of the human mind is that revelation that the Almighty breathed into man the breath of

life, and man became a living soul. The mind is this breath of life, breathed from the lips of the great "*I* AM" into the body already prepared for its reception; and it is that breath of life breathed into no other creature but man, that constitutes him in the image of God. The object of training the mind should be, not only to fulfil her duties well here, but to enable it to stand on high vantage ground, when she leaves this, the cradle of her being. But very few students ever accomplish as much as they expect, or as much as they ought; and one great reason of this is that they fail to obtain this controlling power over the faculties of the mind, because they waste so large a portion of their valuable time. This is the universal experience of students. Every one can look back at his college days, and see the mistakes he made. If the mind has not been trained by previous collegiate or academic studies, you will find the necessity for the closest application all the more urgent in the study of medicine. The EDUCATION of the mind must be your own work. No one can do it but yourself. There is nothing in this world which has not labor and toil as its price. Those islands which so beautifully adorn the Pacific, were reared from the bed of the ocean by the little coral insect, which deposits but one grain of sand at a time, until the whole island is raised above the surface of the waters. Just so with human exertions, the greatest results of the mind are produced by small, but continued efforts.

The mind is endowed with certain faculties or powers, by which it acquires, retains, and digests knowledge; and whenever it has been as highly trained, or developed, as these faculties will permit, and in which it has its greatest power, precision, and readiness of action, then it may be said to be educated. A person may have a good memory, retentive to the minutest fact; he may be a keen observer of things passing around him, or an extensive and diligent reader, and, indeed, may have capacity to acquire and retain knowledge of a rare order; and if this be all, he may still be very far from being thoroughly educated. Many uneducated men are diligent readers, and have good memories, but the end of education is not simply to ac-

quire knowledge. The food we eat, we employ not as an end, but as a means; the end is that the body be strengthened and developed, which is not accomplished by simply eating the food, but only when it has been duly digested and assimilated. So it is with knowledge, which is to the mind what food is to the body. The exercise which the mind has—for instance, in the study of anatomy or chemistry—disciplines certain of its faculties, so that it is prepared for loftier flights, and to achieve new and higher victories. Learn to think on what you study, so that you can have a good judgment. A well-balanced mind is of most essential importance to the success of a physician. Then your minds cannot only investigate, but weigh and balance the opinions and theories of others. Without this you will never know what to distrust, or what opinions to receive. Some of the most laborious men have passed through life without accomplishing anything desirable, and all for a lack of a well-balanced judgment. The last theory with such a man is the true one, however deficient as to proof; the last book is the most wonderful, though it is in *fact* the most worthless; his last visionary speculation, the one bound to make him rich, though it will produce financial emaciation; hence there is a laborious trifling, which unfits the mind for anything valuable. It leads to a wide field, which is a barren waste.

The old maxim "*know thyself*," is worthy of the attention of the student; there is no knowledge to be compared to self-knowledge. The ancients deemed it worthy to be placed over the doors of their temples, so we imagine they thought highly of this kind of knowledge; and when we reflect that these people have left a deeper impress upon the world's history than any other since time began; an age which gave to poetry a *Homer*, to painting an Apelles, to sculpture a Phidias; which had in statesmanship a Pericles, in law a Solon, in oratory a Demosthenes, and in philosophy a Plato, we are more than ever impressed with the importance of "self-knowledge;" without it we are never rightly prepared to estimate our own powers; we may, as most do, suppose we possess some degree of mental power we do not possess, or, at least, that others will not accede

to us; or we may possess faculties of which we are not aware—the former is by far the most likely to be true, for men and women are each possessed with a full share of self-conceit. In your studies you should follow some system, a rule of action, or law. In nature, every effect implies a cause, and every phenomenon implies a law. The combination of the elements in the physical world about us occur in conformity with the laws of chemical union; the forms of the crystal kingdom are built up after the most rigid and beautiful laws; the forms of the plant and animal kingdom, in their development, growth, reproduction, and decay, observe appropriate laws; the wonderful harmony which pervades the system of worlds, wheeling in their immensuosities of space is the result of law; and so the mind, in its search after truth, must do so under the guidance of law. Truth does not wander lawlessly through space, and is not met by the chance of some lucky fool, as it is by the philosopher. Method or law is the leading feature of an educated mind. Another essential quality is *subordination:* this is accomplished through the agency of the will; to be able to control each faculty by means of the will is most desirable, and an exceedingly difficult faculty to obtain. Some men seem to have possessed it to a wonderful extent. When the city of Syracuse was captured by the Romans, Archimides was so much engrossed in one of his problems that he was wholly unconscious of the capture of the city, until he was surprised by a Roman soldier. A famous German philosopher was in the City of Jena at the time of its capture, by Ferdinand, under Napoleon, engaged in writing one of his most profound works; and, on going out to meet his publisher, had his first intimation of the capture of the city by being arrested by a French soldier. Sir Isaac Newton is said to have lived for three years only to think. Sometimes as he would arise from his couch of a morning, he would be arrested by some new conception, and would remain sitting for hours in profound thought, totally unconscious of his situation, or of what passed around him.

My design is to impress your minds deeply that an education is exceedingly difficult to obtain, and that it is a work which

few can say they have accomplished, in its fullest sense, and that you will never obtain any degree of it without striving after it. Do not let the difficulties and perplexities of the pathway discourage you: it is a poor ideal that can be reached without time and toil, or that it is possible to surpass in the actual. It is much better for us to have an ideal which we can never quite reach, provided it be a just one, and in the line of possible accomplishment, and that every step we take is towards it, and carries us nearer and higher, and that we feel that we have not a moment to linger, not even the loss of a day, nor an hour. Mental training is obtained in proportion to the time and labor spent. The highest degree possible requires an amount of labor terminated only with one's life. Newton was in his 85th year improving his chronology. The mind becomes possessed of knowledge by means of the senses—we see, we hear, we smell, and we taste; these are our five senses, our perceptive faculties, and are the avenues of knowledge to the mind. By means of our senses we become acquainted with the qualities of things about us; one thing is hard and round, another is soft and square; one is sweet, another *sour*, beautiful, or homely—this is the simplest knowledge, and yet it illustrates how we become possessed of knowledge. Now, this knowledge would do us no good unless we could retain it, so we are provided with a faculty called memory; and then, after we have acquired and retained the knowledge, it would do us but little good if we could not call up from our past experiences what we have, for instance, read, or heard, or seen; consequently, we are provided with another set of faculties, by which we are enabled to classify our knowledge in the storehouse of memory, by which facts possessing certain characters, resemblances, analogies, or differences are grouped together; and by this set of faculties, we can bring up from memory any fact, and compare it with another fact. It is by this set of faculties that we classify and discover general truths, which do not appear at first sight, and by which we discover principles and laws, and institute science and philosophy. We cannot perform an act of memory until we have something to remember,

nor can we perform an act of comparison until we have acquired and retained knowledge—then we say that the order of these faculties, in their development and use, is memory, retention, and reflection.

The popular saying that "practice makes perfect" is a true one; it is a law, and applies in many ways, either to the physical, mental, or moral nature. We are familiar with it in physiology, where it may be traced in the paralyzed limb, and in the one daily employed in vigorous exercise, or, for instance, in the muscles in the arm of the blacksmith. The same law holds good for the mind; for by constant vigorous exercise, its faculties become strong and well-developed, and by inaction they become weak and incapable of much effort. You are well aware how difficult it is for a beginner to manipulate the keys of a piano, even in the simplest piece of music, and that after assiduous exercise or practice, a celerity is obtained which almost surpasses belief. This is also true of the mind. Make it your first object to fix and hold your attention upon your studies. You may make many efforts at this without success: this is said to have been the secret plan of Demosthenes, who shut himself up in his celebrated dark cave for study; and this will also account for the fact that persons who are unexpectedly deprived of their eyesight will not unfrequently make advances in thought, before unknown to them. *Patience* is a virtue kindred to attention, and one that is miserably lacked by ninty-nine out of every one hundred of the human race: it disposes to quiet, steady efforts, even in the face of difficulties. Sir Isaac Newton said, the difference between his mind and the mind of others consisted solely in his having more patience. There is no department of human effort in which *patience* is more essential than in the study of medicine. It is impossible to learn everything at once; the tree must grow by inches; patient labor and steady effort will bring everything in its time. It is better to learn less, and do it thoroughly, than to hasten impatiently over a subject. This has been compared to an army conquering a country. If you are patient, and conquer everything before you thoroughly,

then you will pass on from victory to victory; but if you have left, here and there, a fort or a garrison unconquered, you will have an army hanging in your rear, and your ground will soon need to be reconquered: so it is in the study of your chosen profession. It is said that the ancients had a great recompense for the scarceness of their books, in the thoroughness with which they were compelled to study them; a book had to be all copied with a pen, to be owned; and he who transcribed it would be likely to understand it. It is said that Demosthenes copied Thucydides ten times. Then it is important for you to be thorough, have a clear understanding of all that you go over. Keep in mind the remarks of the gifted Mr. Wirt: "Take it for granted, there can be no real excellence without great labor."

ARTICLE XL.

NEURALGIA OF THE OVARIES, TREATED WITH THE MURIATE OF AMONIA AND TR. OF ACONITE.

BY JAMES T. NEWMAN, M.D., Chicago.

DEAR EXAMINER:—In contributing this mite to your pages, remember that I do not claim it as anything new; to your many readers, it is only in confirmation of what has long since been spoken of that I reproduce it, for their careful consideration. Having three cases of this troublesome disorder to report, I will now proceed to do so, if you will pardon me for trespassing on your valuable space.

M. B., a very intelligent woman, applied to me for treatment; her statement was concise, and to the point, replying with great accuracy to all questions asked, rendering it very easy for me to come to a conclusion as to what the matter was. I diagnosed neuralgia of the ovaries. The history of the case I will lay before you, that you may be enabled to follow me, step by step. She told me, for the last two years she experienced great difficulty in menstruating. I examined her, and found consider-

able fulness in the right illiac region, with great tenderness. Keen, lancinating pains would shoot down the inner part of the thighs, causing her sometimes to cry aloud with pain.

I immediately ordered a plaster of cantharides, to be applied over the seat of pain. After the surface became vessicated, I sprinkled the salts of morphia upon it, at the same time prescribed as follows:—

℞. Quinia Sulph.,---------- gr. xij.
Ext. Hyoscyam., ---------- gr. xij.
Mice Fiat in Chart., ---------- No. xij.

I continued to visit her regularly, once a day, for a week, but finding no relief, I resolved to change the treatment. In looking over Braithwaite, part LVIII, page 251, I chanced to see an article on the subject of which I am writing. Although I was at a loss to give its rationale; and never since I have commenced the practice of medicine have I given an article, without being convinced in my own mind what it was going to do. But, however, I resolved to give the remedy proposed a trial. I ordered the following:—

℞. Ammonia Muriatis,---------- ℥ij.
Tr. Aconiti, ---------- ℥ij.
Sy. Aurant. Cort.,---------- ℥viij.
Mice fiat mistura.

Sig. Teaspoonful three times a day. The second day after having taken the medicine, the sharp pain was gone, she could feel no more of it. I told her to continue the use of the mixture for eight or ten days. She did so; at the end of which time her menses came on, and passed off so easily that she told every one that came in her way. She had a slight return of it, but upon the exhibition of the medicine it entirely disappeared.

Case II. A mulatto woman, aged 29, came to me for relief, having heard from Case I. that I had cured her. I examined her, and found the same symptoms that presented themselves in Case I.

I prescribed the muriate of ammonia and tr. aconiti, in the same doses. At the end of a week she said she was well.

CASE III. An Irish girl was troubled with painful menstruation, and keen, shooting pain in the groin and back. I exhibited the above-named medicines, in the same quantities as in Cases I. and II. She used it for eight or ten days; and at the end of which she pronounced herself well. Furthermore, allow me to say, that this has been over six months ago, and not the slightest return of the disease in either of those cases has appeared.

ARTICLE XLI.

EXCISION OF CLAVICLE FOR OSETO SARCOMA.

BY N. SENN, M.D., Ashford, Wis.

Joseph Ammerling, aged 13, a Bohemian boy, applied to me for treatment of a swelling on the left collar-bone, June last.

No predisposition to hereditary disease existed in his family. He always enjoyed good health, until, during the early part of last winter, he noticed a small lump on the anterior surface, at the junction of the middle with the sternal third of the left clavicle. It produced but slight inconvenience, and was only slightly tender on pressure, until the month of May; at that time, it rapidly increased in size; at the same time, it became more painful, especially on moving the arm of the corresponding side, so that when I first saw him, he was unable to use it to any extent.

He then presented a somewhat anæmic appearance; but general nutrition did not appear much impaired. The tumor had attained the size of an ordinary orange, with a broad base, imparting a semi-elastic but firm feel to the touch; taking hold of the clavicle at the distal side of the tumor, it could be moved freely, without affecting the sternal end, producing, at the same time, a grating sound; showing conclusively that there existed a solution of its continuity in the interior of the tumor; there was considerable tenderness on pressure; the skin presented its normal appearance.

As an operation offered the only chances for a recovery, I called in consultation my friend Dr. Marsden. His opinion agreeing with mine, in regard to the diagnosis and treatment of the case, after having obtained the consent of the parents, we operated, June 4th, 1869.

Besides Dr. Marsden, I was assisted by my student, Mr. Jones. After the patient was fully under the influence of chloroform, I made an incision over the centre of the tumor, parallel with the clavicle, extending from near the acromion process to the sterno clavicular articulation. Dividing the skin, superficial fascia, and platysma myoides, the tumor now became apparent beneath the superficial layer of the deep cervical fascia, and the muscles in that region; the former was carefully divided with the knife, from the rest of the structures surrounding the tumor, it was separated with the handle of the scalpel and the fingers—this part of the operation was a tedious one, as the attachments were firm and extensive—the anterior and superior sterno-clavicular ligaments were divided with the knife, then, by inserting an elevator between the articular ends, the posterior attachments were torn through; the tumor was now elevated from its bed, and the clavicle divided with a small metacarpal saw, about an inch and a-half from its distal end. During the operation, the hemorrhage from the small arteries was controlled by pressure with the end of the fingers of the assistants. No ligatures were required. After all venous oozing had ceased, the cavity was washed out with a watery solution of carbolic acid (20–1), and the edges of the wound accurately approximated with nine silk sutures, and supported by long strips of adhesive plaster; a compress, saturated with the same solution, and kept in place with a figure 8 bandage, finished the dressing. The arm was placed in the same position and supported with adhesive plaster, as in fractures of the clavicle. The patient was directed to be kept quiet and placed upon nutritious fluid nourishment.

He slept well during the first night, with but a small amount of anodynes. The day following, he had a little fever, but hardly any pain, and the appetite remained good. On the

third day, he insisted on getting out of bed and walking around, as he felt better than before the operation. The first dressing and the sutures were now removed. About two-thirds of the entire wound had united, leaving a wound at each extremity of the incision, healthy in appearance; they were dressed daily with a solution of carb. acid in linseed oil (1–6). The granulations, becoming spongy, were touched every third day with the solid nitrate of silver. The patient improved rapidly, and in about three weeks the wound had entirely healed. There was hardly any suppuration during the whole course of treatment. Along the line of incision there is now a hard ridge of cicatricial tissue, which answers very well for the clavicle, as the patient can move the arm in any direction, and work with it as well as with the opposite one. Except a slight falling forward of that shoulder, and the large cicatrix, nothing would indicate the absence of the clavicle.

The interesting facts about this case are:—1. The slight amount of constitutional disturbance that followed such a severe operation. 2. The almost unimpaired use of the arm, after the removal of almost the entire clavicle. The tumor is oblong and somewhat flat, and measures 6′ in circumference, 3′ in length, and 2½′ in thickness. It is covered by the distended periosteum; its interior is filled with a red, fleshy, granular mass, and softened and destroyed bone, peculiar to all osteo sarcomatous growths. In the centre, the whole thickness of the bone was destroyed. No microscopic examination was made.

M. L. CAILLETED demonstrated by numerous experiments that pressure retards all chemical decompositions in proportion to its degree. A plate of zinc lost, under ordinary atmospheric pressure, immersed into muriatic acid, 10.0 parts; under a pressure of 60 atmospheres, 4.7 parts; and, at 120 atmospheres, 0.1 parts, in the same period of time. The boiling point of all liquids is affected similarly, and CAILLETED concludes that all chemical processes are in immediate dependance upon the surrounding mechanical circumstances.—*Journ. Phar. et Chimie.—Chicago Pharmacist.*

The Clinique.

CLINICAL CASES IN MEDICAL WARDS OF MERCY HOSPITAL—TYPHOID FEVER, CARCINOMA, WITH EXTRAORDINARY SYMPTOMS.

By N. S. DAVIS, M.D., Professor of Clinical Medicine.

Case I. *September 29th, 1869.*—The case before you, gentlemen, is that of a laboring man, aged about 28 years, naturally spare in flesh and of nervous temperament. He came to me about four weeks since, in my office, complaining of the usual *initial* symptoms of an attack of typhoid fever. I directed him some medicine, and proper hygienic management, and saw or heard nothing more from him until he was brought into this ward of the hospital, about one week since. At the time of admission his case presented all the symptoms of a grave form of typhoid fever, in the advanced stage of its progress. His skin was dingy; countenance dull; lips retracted and dry, leaving the upper teeth covered with sordes; mouth and tongue dry; mind somnolent and sometimes wandering; skin dry and rough, and above the natural temperature; muscular movements unsteady and awkward; abdomen tympanitic and full; bowels moving five or six times per day, the discharges being dark-brown and thin; respirations 20 per minute and short, with dry bronchial rhonchi over both sides of the chest, and some dulness on percussion over the lower and posterior parts. The pulse was soft, quick, and varying from 120 to 130 per minute. If we suppose that at the time he called at my office, he was in the forming stage of the fever, it will be seen, that when admitted into the hospital, he was at the end of the third week of the disease, and the symptoms such as to render the prognosis doubtful.

The soft, frequent pulse, the mental dulness, the muscular unsteadiness, the dark hue of the lips and skin all indicate that profound typhoid condition, when the qualities of the blood and

the properties of the tissues are both impaired, causing all the resulting actions in the economy, such as capillary circulation, secretion, nutrition, inervation, etc., to be performed feebly. In the more malignant cases of typhus and typhoid fevers, these alterations in the qualities of the blood and the properties of the tissues are sufficient to suspend the organic changes, and, consequently, to prove the direct cause of death. In addition to the general pathological conditions, there are important local changes in the viscera of the chest and abdomen. The dry, bronchial rhonchi over the whole anterior part of the chest, with dulness on percussion over the lower and posterior part, and the short inspirations, show that the bronchial mucous membrane is in a state of congestion, and the parenchyma of the lower lobes so occupied with hypostatic or passive infiltration, as to materially diminish the capacity of the lungs for air.

The condition of the lungs, of course, lessens the oxygenation and decarbonization of the blood, and thus indirectly increases the general impairment of function throughout all the organs. The tympanitic abdomen, with the frequent, thin, redish-brown, and copious discharges from the bowels, indicate, in this stage of the disease, extensive softening, and, perhaps, ulceration of the aggregated glands of the ilium and mesentery.

These local pathological conditions in the chest and abdomen are frequently the most dangerous developments, during the progress of this variety of fever; sometimes determining a fatal result in cases presenting only moderate primary changes in the blood and properties of the tissues. In the patient before us, at the time of his admission, the symptoms, as we have already described, indicate much general depression, with serious lesions, both in the chest and abdomen.

Hence, the special indications for treatment were, to sustain the general properties and functions, by plenty of good air and judiciously selected nourishment, and to administer such medicines as would relieve the congested condition of the bronchial mucous membrane, on the one hand; and on the other such as would arrest the process of softening and disintegration in the glands of the ileum and colon. The first object was secured by

the size of the ward, its free ventilation, and the limited number of patients in it, and the feeding of the patient, animal broths, well salted, alternately with thin, sweet milk and wheat flour porridge. These articles of nourishment, given in small quantities, and at short intervals, are capable of being taken up by the absorbants and lacteals of the stomach and duodenum, leaving the smallest amount of fecal residue to pass over the diseased surface of the ilium and colon. To accomplish the second purpose, we gave one fluid drachm of the following mixture, every four hours:—

℞. Hydrochlorate Ammonia,---------- ℥iij.
Tart. Ant. et Pot.,---------- 2 grs.
Sulph. Morph.,---------- 3 grs.
Syrup Glycirrhiza,---------- ℥iv.
Mix.

To secure the third object we give one fluid drachm of the following emulsion, every four hours, alternately, with the foregoing prescription:—

℞. Ol. Terebinth.,---------- ℥iij.
Tinct. Opii,---------- ℥iij.
Pulv. G. Acaccia, } āā,---------- ℥iv.
White Sugar, }
Rub together, and add Mint Water,------- ℥iij.
Mix.

After these remedies had been used three days, the dry, bronchial rhonchi diminished, and were partially replaced by moist mucous rattles; the skin became less hot and dry; but the pulse remained weak and frequent, and the mind more wandering.

The emulsion was continued every four hours, and 10 drops of chloroform added to each dose. The use of the solution of hydrochlorate of ammonia, etc., was diminished to one dose, morning, noon, and evening. The same nourishment was continued as before. Four days have elapsed since any alteration was made in his treatment.

If you now examine the patient carefully, you will find the skin but little above the natural temperature, and more soft;

the countenance more pale; the lips thin, and still somewhat retracted, but the sordes mostly gone from the teeth; the middle of the tongue dry and red, but moist and white along the margins; the respirations shorter and more frequent than natural, with a moderate development of mucous rhonchus over the anterior part of the chest, and some dulness on percussion over the lower and posterior part. (Here the class were required, individually, to auscultate the patient.) The pulse is 110 per minute, small and soft. The abdomen is only slightly tympanitic, but the intestinal discharges continue thin and light-brown, and average from three to five discharges in the 24 hours. You will readily perceive that some of the symptoms to which your attention has been called indicate improvement, while others point to a more doubtful prognosis.

For instance, the nearer approach to a natural condition of the skin, the less appearance of sordes on the edges of the lips and teeth, the moist condition of the margins of the tongue, and the lessening of morbid sounds in the chest all indicate the commencement of convalescence. But the continued weakness and frequeney of the pulse, with the quality and number of the intestinal discharges, indicate the continuance of a serious amount of disease in the ilio-cæcal portion of the alimentary canal. It happens not very unfrequently in the severer cases of enteric or typhoid fever, that all the general symptoms of fever subside, and convalescence ensues, while these patches of aggregated glands in the ilium, which had become softened or ulcerated during the progress of the fever, are still not cicatrized or much improved in texture. Your attention is called to the fact as one of much practical importance. If it be overlooked, and as soon as the patient appears otherwise convalescent, all remedies designed to exert a soothing influence on this part of the mucous membrane are withdrawn, and a liberal diet allowed, it will sometimes happen that the intestinal evacuations will gradually increase in frequency; and after a week of partial convalescence, the abdomen will again become tympanitic, the mouth dry, the pulse frequent and feeble, with rapid loss of strength, until a fatal result is reached. In a smaller number

of cases, the general appearances of convalescence continue, but the patient does not improve in strength.

The bowels do not become regular, sometimes moving three or four times in succession, and then quiet 24 or 36 hours. After a time, varying from one to three weeks, they are suddenly attacked with acute pain, in some part of the abdomen, followed rapidly by abdominal distension, tenderness, and prostration. The pulse becomes very rapid and feeble; the countenance hippocratic; the skin covered with cold perspiration; and death follows in from 24 to 48 hours. These are cases in which some one of the patches of Peyer's glands remained unhealed, after the convalescence of the general fever; and instead of subsequent cicatrization, it slowly extended, until the coats of the intestine were perforated, inducing, suddenly, peritonitis and death. Many years since, a marked instance of this kind occurred in the person of a medical student in this city.

After an apparently mild course of typhoid fever he convalesced, continued to be up a part of each day, for a week, and began to go to the table for his meals, with other boarders, when he was attacked suddenly with fatal peritonitis, from a perforating ulcer in the intestine. In a much larger number of cases, however, patients convalesce from typhoid fever, while numerous places in the mucous membrane are in a state of partial or complete ulceration. They regain a fair degree of flesh and strength, and often attempt to resume attention to their ordinary work. But the intestinal evacuations never become regular. In some, there will occur from one to three or four thin, fecal discharges per day, constituting what might be styled a slight, chronic diarrhœa. This state of the system will continue, in some cases, many months; and, finally, the patients begin to lose flesh and strength, and slowly reach a stage of fatal exhaustion.

In other cases, the uncicatrized patches appear to be limited to the colon. The patients recover a fair degree of flesh, and resume attention to business, but their intestinal evacuations remain very irregular, usually going from two to four days

without any discharge, and then have six or eight in a single day. It would seem that the peristaltic motion of the small intestines was impaired, and the fecal contents were carried forward only slowly; but so soon as they begin to accumulate in the colon, and come in contact with the patches of diseased membrane, an exaggerated motion is started, which does not stop until the whole canal is emptied, when it returns to its dormant state as before. Patients have come to me often with this state of the bowels, and on carefully inquiring into their history, I have traced them directly back to an attack of typhoid fever, which had occurred, sometimes, four or five years previously. I am thus particular in calling your attention to this point, because it is one of direct practical importance.

Careful attention to the state of the bowels, during the convalescence from typhoid fever, will save many patients from troublesome sequelæ. The patient before us gives plain evidence of commencing convalescence, but his bowels remain actively loose, and his pulse quick and feeble.

We shall, therefore, continue to give him the emulsion of turpentine and laudanum, every four hours, and feed him on sweet milk and wheat-flour porridge, until the intestinal discharges become more natural.

Case II. Mrs. ——, aged 40 years, native of Ireland, was brought to the hospital several weeks since, from Kansas, where she had been living with her husband for some time past. I do not call your attention to this case for the purpose of discussing either the pathology or treatment of the disease under which she is laboring, but simply to point out some features that are of rare occurrence. You perceive that the right side of the face and neck are much swollen, and the right arm and hand still more swollen, distending the skin until it is shining and tense to the ends of the fingers. As I remove the covering you see the same swelling occupying the whole of the right anterior half of the chest, from below the breast to the top of the shoulder and neck, and from the middle of the sternum to the right laterally to the anterior edge of the scapula.

This swelling, embracing the right anterior and lateral half of the chest, right arm, shoulder, and corresponding side of the neck and face, is simply œdementous, pitting, as you see, on pressure, and accompanied by no discoloration, except along the right side of the trachea where it is purplish, as though the extravasation of serum or water had been accompanied by some of the red corpuscles. The œdematous infiltation in the neck and over the upper end of the sternum is so great as to render both respiration and deglutition somewhat difficult, and causing her to remain in an upright or inclined position nearly all the time. On examining further, you find the right breast little more than its natural size, the skin looking corrugated, and the nipple drawn in, while to the touch it is hard as a stick, and immovably fixed to the ribs, presenting a good sample of schirrhus, or hard cancer, involving the whole breast, mammary gland, areolar tissue, and all. The left breast is larger, but moveable on the ribs, with hard lumps or nodules of schirrhus limited to the mammary gland. There are no enlargements of the lymphatic glands in either axilla, or along the clavicles externally. The patient is of a sanguino-lymphatic temperament, not emaciated, and the general functions of the system very well performed.

The chief peculiarity of this case, which distinguishes it from ordinary cases of cancer in the breast, is the extent and location of the œdema.

Schirrhus of the breast is often accompanied by enlargement and induration of the Lymphatic glands in the axilla and along the border of the pectoral muscle. And these glands sometimes press upon the nerves and bloodvessels to such an extent as to make the arm both painful and œdematous.

But in this case there are no tumors in the axilla, and none to be felt externally along the clavicle. Neither is the œdema limited to the arm, as is usual in such cases: but it extends to all that part of the right side of the chest, shoulder, neck and face, from which the blood is returned through the right subclavian vein. This would indicate the formation of some cancerous growth behind the first rib or its junction with the

sternum, in such position as to obstruct that vessel. The tumefaction caused by the œdema, however, is such as to prevent any satisfactory examination of that region, either by palpation or auscultation. That the œdema is the result of direct obstruction of bloodvessels, either by pressure or emboli, is evident from its strictly circumscribed character.

When dropsical effusions take place from spanæmia or impoverishment of the blood, they are general, and are always influenced by gravity, and hence appear most prominent in the feet and legs first. But here the lower extremities are entirely free. The apparent obstruction of the subclavian vessels, in this case, and the increasing œdema in the neck, will probably cause life to terminate early, by complete suspension of respiration and deglutition. As the hour has expired, I will not detain you for any comments on the subject of treatment; for, in this case, medicine and surgery are alike powerless.

COOK COUNTY HOSPITAL RECORDS.

SERVICE OF DR. H. A. JOHNSON.

TYPHOID FEVER?

WM. E. QUINE, M.D., HOUSE PHYSICIAN.

Patrick G. Ireland, laborer, aged 22, admitted Oct. 4, 1869.

History.—Delirious on admission, and no previous history obtained. We noticed a dull, besotted expression, suffusion of eyes, hurried breathing, hot, dry skin, soft, quick, frequent pulse, sordes on teeth and lips, dry, brown, fissured tongue, fulness, but not marked resonance, of abdomen, great tenderness of, but no gurgling in, right ileum, and distension of bladder.

Progress and Treatment.—Catheterized. Infusism digitalis, to diminish the frequency of the pulse, and to aid warm sponge baths in reducing temperature. Strychnia and acid nitric to stimulate the failing functions of the nervous system.

October 6th, 1869.—Bowels moved three times, after the administration of an enema. Urine very scanty and retained

in bladder. Potassæ nitras, grs v, every three hours, and catheter introduced twice a day.

October 8th, 1869.—Skin not so hot and dry. Urine more copious but is still retained; slight return of consciousness; tongue quite moist and more readily protruded; pulse fuller, stronger, and less frequent. Infusism digitalis discontinued.

October 10th, 1869.—Urine continues copious; skin moist, but cold; tongue, also, moist and cold; no movement of bowels since the injection was administered on the 6th inst.; pulse a little increased in frequency, and very feeble. Died, October 11th, 1869.

Autopsy.—The contents of the abdomen only were examined. Liver, spleen, and mesenteric glands enlarged and softened; hyperæmia of the small and of the ascending portion of the large intestines. Solitary glands and Peyer's patches presented nearly all the stages of destruction and commencing repair; and two points of ulceration extended to the peritoneum.

Remarks.—This is the second febrile disease that has come under my observation, in which there was obstinate constipation, entire absence of eruption, and no gurgling in the right iliac fossa, and in which an autopsy revealed very decided "typhoid lesions;" in fact, in the first instance, peritonitis, induced by perforation of the intestine, immediately preceded death.

Correspondence.

PROF. DAVIS:

DEAR SIR:—The following case which recently came under my observation for treatment presents some interesting features, illustrative of the effect of long standing indigestion upon the nervous system:

Mr. P., aged 50 years, of great muscular development and strength, by occupation a tradesman, has for 15 years suffered with the ordinary symptoms of dyspepsia, and some three months ago, he had an attack of remittant fever: aside from

this, his health has for years been good, until some two months ago, when he was suddenly seized with a sort of sinking or fainting spell, which continued some five minutes; consciousness entirely suspended, with a feeling of oppression and mental debility, with partial loss of memory.

Attacks like this have since continued to occur, sometimes five or six a day, and again disappearing for three or four days, only to return again with more unpleasant results, reducing his physical strength, and greatly impairing the strength and activity of his mind. It was upon one of these returns of attacks that I was consulted, and asked for an opinion as to the pathological condition of the gentleman. Upon examination, I found him to be a man of some 170 or 180 lbs. weight, compactly built, with a moderate amount of adipose tissue; complexion rather florid; temperature of the skin above normal; mental depression, with much anxiety concerning his condition, and apprehensive that he was becoming demented. Can not continue a connected train of thought; suffers no pain; sleeps ordinarily well; circulation good; pulse full; tongue coated with a heavy, white coat in the centre; appetite good generally, sometimes voracious; bowels regular. The "spells" of which he complains occur in the daytime, but at no particular period of the day.

I believe that the symptoms detailed result from functional derangement of the nervous system, resulting from an impoverished state of the blood, depending primarily upon imperfect digestion, and deficient nutrition and assimilation.

The attacks do not resemble epilepsy in any particular. The patient for a long time believed that his stomach was infested with a reptile of some kind, and said that the "spells" were preceded and induced by the reptile making an effort to get into his throat, and that when it reached a certain point in his throat the attack came on. He was accordingly treated for tape-worm, and has undergone a variety of treatment, general and alterative—but all has availed nothing.

He is now upon the following:—

℞. Brom. Potass, ---------- ℥ij.
Mur. Tr. Fe.,---------- ℥j.
Quinia, ---------- gr.xvi.

Syr. simplex ℥j., misce; of this he takes one teaspoonful half-hour after meals, with a pill of rhei. every morning. I think he is being benefited by this treatment.

I desire an expression of opinion from the profession, as to the pathological condition of this gentleman; if I have detailed his condition with sufficient conciseness to render such an expression possible.

THEODORE GRIFFIN, M.D.

Troy, Mo.

Foreign Correspondence.

BERLIN, *September 8th, 1869.*

DEAR EXAMINER:—When in Wiesbaden, I was interested in calling at the laboratory of Prof. Fresenius, having used his book of Qualitative Analysis in America, which, with his Quantitative Analysis, is one of the best books in the hands of the student. I believe the laboratory is unconnected with any other institution. It accommodates about 50 students, and is well furnished with apparatus, but not so convenient as some of our similar laboratories at home. The Professor lectures several times each week. The course occupies about two years, at an expense of $100 a year. There is some instruction also given in pharmacology, mineralogy, and organic chemistry. The school is especially adapted for analytical chemists, and is but little frequented by medical students.

At Bonn, the lecture-room had closed, and no clinics were being given. I visited the surgical wards of the Catholic Hospital, which had many interesting cases, but were in the most slovenly, neglected condition of any wards I have yet seen. The building was erected for a castle, and is in a measure unfit for its present use. One of the cases was an infant about two weeks old, which had been operated on for artificial anus.

Before the operation, at about the third day, the child was icteric and melanotic. A considerable quantity of meconium and fæces were discharged at the completion of the incision. The child rapidly attained a normal color, and when I saw it, seemed in a hopeful and comfortable condition. Bonn has about 20,000 population, and, of course, does not afford very extensive hospitals. About 1700 out-patients had visited the medical clinic this year, up to August 28th, and about an equal number the surgical clinic. Prof. Veit is an able lecturer on obstetrics and diseases of women, and has written a book of some value on the latter subject. Prof. Rindfleisch is one of the attractions of the university, being one of the most reputed authors on pathological anatomy in the country. Bonn has about 190 medical students, 60 of whom attend the clinics.

Göttingen has a neat and orderly kept hospital, with about 130 patients, among whom were twelve or more with venereal disease.

The Anatomy Museum contains something over 4000 specimens, among which is a collection of over 300 cranii, of different races of men.

There were several specimens injected with quicksilver, beautifully illustrating the lymphatic system.

Prof. Schweigger gives four lectures and four clinics on the eye each week, and two hours on the use of ophthalmoscope. Prof. Baum gives instruction in surgical operations, four hours a week, and a daily clinic. Lectures on general surgery five times a week, by Prof. Lohmeyer.

Dr. Marmé gives lectures on electro-therapie, with practical application of the induced and constant currents, twice each week. The medical department of the university, however, is best resorted to for anatomy, physiology, and chemistry, which are provided with numerous and able instructors, such as Profs. Henle, Krämer, Krause, Meissner, Wöhler, Fittig, Von Uslar, Boedeker, and others. The medical students number 150.

The Berlin medical school vies in exellency with those of Paris, London, and Vienna; and it is impossible to form any correct idea of its advantages at this season of the year, when

lectures and courses have ceased, and many of the professors away for recuperation and pleasure. It would be somewhat surprising if Berlin, with about 700,000 population, and a celebrated university, should leave anything undone that could be done, to render every possible facility to the medical student to acquire knowledge. Virchow and Rokitansky, Frerichs and Oppolzer, Gräfe and Arlt, Martin and Braun, Von Langenbeck and Billroth, as representatives of the Berlin and Vienna schools, are all men of profound learning and vast experience; and, practically, they can be said to scarcely excel each other in their particular departments. Many Prussians go to Vienna, some Austrians come to Berlin. But as I often have occasion to remark to German students, Americans do not resort to Europe to hear their medical professors, as in many departments we have their equals or superiors in America, but rather to see and examine their patients; and whatever city gives the greatest freedom in this respect will be the more attractive to us.

The largest hospital of Berlin, Charité, has an average list of about 1360 patients, and is a model of cleanliness and order. In this are most of the public and many of the private courses given. There are several other hospitals in the city, accommodating from 50 to 400 patients, some of which are accessible to students. To the German student who has five years to his course, or the specialist, I presume Berlin furnishes as good opportunities, and, perhaps, in some, better than Vienna; but for most Americans who wish to carry on several subjects at the same time, he can undoubtedly accomplish his ends better in Vienna, where the patients are concentrated in one building.

Much more attention is given to skin disease and venereal in Vienna than here. The death of Prof. Böhm, and continued feebleness of Prof. Gräfe, leave the eye department a little unsettled here. Chemistry, anatomy, and physiology are more advantageously studied here.

Vienna has about 1200 students, Berlin 500. Those who have studied at both places, so far as I have learned, give testimony in favor of Vienna. Yours truly, F.

ON THE PATHOGENESIS AND TREATMENT OF STERILITY IN THE HUMAN FEMALE.

By WM. C. ROBERTS, M.D., of New York.

In May last, I read before the N. Y. Academy of Medicine, a paper on the causes of sterility in either sex, based mainly upon physiological relations.

Subsequently, Dr. Kammerer read a paper on the pathological conditions causing sterility, based upon a view of 408 cases, 201 of which had occurred in his own, and 207 in clinical practice (*Trans. N. Y. Ac. of Med.*, vol. 3, p. 7). These cases, which embraced the numerous descents, deviations, and diseases to which the uterus and its appendages are liable, were treated with more or less success, according to the usual methods; the proportion of success, so far as the removal of the sterility was concerned, being about one-third of the cases treated. One case in particular, however, deserves to be mentioned (No. 12); that of a woman whose inner uterine orifice was dilated at one session just after menstruation, and who conceived, after a barrenness of four years, immediately after; whether *propter hoc*, cannot, perhaps, be exactly determined. The physiological causes of sterility are not alluded to in Dr. K.'s paper, unless, indeed, the dilatations of the uterine orifices were intended to allow of an easier admission of the spermatozoa to the cavity of the uterus; and the intra-uterine injections employed to remove the noxiousness of the secretions.

In the paper which I read before the Academy, I showed:—

1. That the generative apparatus of both sexes must be in a healthy condition. In the male, the penis must be capable of erection and ejaculation, and of emitting healthy semen.

In the female, the uterus and its appendages must exist, and be perfect; the ovaries contain fecundible ova; the tubes be pervious; the lining membrane of the cavity and neck healthy; and the os uteri, externum and internum, hymen, and vagina, pervious.

2. That it was by no means necessary that there should exist, at the moment of coitus, any orgasm on the part of the female, or a complete introition of the male organ intra vaginam; a very slight peri-vulvular congressus depositing the semen upon the vulva, sufficing for impregnation.

3. The ripe graafian vesicle, secreted either just before, during, or after menstruation, and even, though not often,

during the intermenstrual period, must, in some part of its course into the uterus, come into direct and immediate contact with one or more living spermatoza, in order to be fecundated.

4. Semen contains, as its most important constituent, animalcules, spermatic cells, zoospermes, spermatozoa, or zoids, as they are variously called according to the idea which is formed of their nature. In the field of the microscope, they are seen to move about with varying activity, and whether or not they be endowed with true vitality, life, or be or be not organized animals, which last seems generally now to be believed, their volition is seemingly directed by instinct, towards, and in spite of all obstacles, the ovum which they are to impregnate. In a natural temperature, they live for 48 or 72 hours; are found living, even in the cadaver, after 24 hours, and in bitches have been seen to move seven or eight days after copulation. Acids, urine, electricity, strychnia, narcotics, and certain vagino-uterine secretions destroy them; but of this last hereafter. Probably they are reproduced; they are certainly nourished: strange creatures, which, by union with an ovule, are capable of communicating to it, not only the physical resemblance, but the temperament and constitution of the parent. They appear in the semen at puberty; are found afterward at all periods of life, and in men of advanced age (82) have been found as numerous as in the adult.

5. The material contact of the semen and the ovule, both animated by their vitality, and perfect in themselves, is the essential condition of fecundation, and the intimate fusion of these two elements is alone capable of giving birth to the new being. *If any obstacle* impedes the immediate contact of the two germs, conception on the part of the female is impossible. Upon an accurate knowledge in regard to these causes depends the successful treatment or cure of sterility.

6. The *aura seminalis* alone is insufficient. Filtered semen is equally so. No part of the semen but the animalcules suffices.

7. The fecundating power of the animalcules seems connected with their vitality, for it diminishes, and is completely extinguished with their movements. Semen is infecundible without living spermatozoa; and it is certain, however they enter it, that they get within the vitelline membrane of the ovule, and have been seen in immediate contact with the yolk, when they part company and disappear by liquefaction.

8. The merest drop of a high dilution of the semen of a frog, directly applied to the egg of the female, suffices to fecundate;

but more than one spermatozoid is required. Two hundred and fifty-five, in the experiments of Prevost and Dumas, impregnated sixty eggs out of three hundred.

9. Neither the movement of the vibratory cilia, nor an aspiratory spasm, nor capillarity, can account for the progression of the spermatoza. It is to their own motility, and to their power of overcoming obstacles, that this is wholly due. The passage of the spermatoza from the uterus into the tubes occupies 8 to 10 hours; arrived at the free extremity of the tube, they reach to, or upon the ovary, by means of the fimbriæ which unite the *pavillon* to that organ. If there they meet with a mature ovule, fecundation may result. Twenty or thirty minutes are required to enable them to enter the uterus. The tubes take from two to six days to transmit the detached ovule to the uterus, where, if previously fecundated, or when fecundated it stops and is developed, imbedded in decidua. If not, it escapes with the decidua in 10 or 12 days, or at the end of menstruation. The period most favorable for impregnation, then, is immediately before, or during, or soon after menstruation ceases. The flow of menstrual blood does not impede, but rather accelerates the progress of the spermatozoa. But how are we to account for fecundation during inter-menstrual periods, unless we suppose that coition hastens the development and detachment of a mature ovum? Fecundation and coition are separated for at least the time which is required for the spermatozoa to pass through the uterus and tubes, and reveals itself by no special signs. A single act of coitus may suffice for impregnation, of which many instances are known. If, now, we attempt to assign the causes of infecundity from a physiological point of view, we shall find that men are infecunds because they are impotent or aspermatic, *i. e.*, incapable of erection or ejaculation: and even when capable of emission, are as aspermatozoic, that is, secrete a semen or fluid which contains either no or no living spermatozoa. Eunchs possess for a while an incomplete power of erection and an ejaculation which must be aspermatozoic, which, for the lack of the stimulus of venereal appetite, they gradually lose. Impotence is not necessarily associated with either aspermatism or aspermatozoa. It is sometimes purely nervous, and when cured, the power of fecundation may exist or return. It occurs among the newly married and in the old. But very old men are not necessarily infecund, as we have seen, and the case of old Parr is in point. The only way in which aspermatozoa can be positively ascertained, is by submitting the semen to the microscope soon after its emission.

But it is chiefly with infecundity in the female that we are concerned, and allowing that there is no fault in the generative faculty of the male, it behooves us to enquire into its causes. Admitting that no physical defect of organism occur in her, and that, as we so often see, she is robust, healthy, menstruates more or less perfectly, and is free from organic uterine malformation or disease, why is it that the spermatozoa do not reach and fecundate her ova? Ill-health may, I think, possibly prevent this from occurring, by impairing the fecundity of the ova, or faults in the ovary or ova may have a similar effect. Dysmenorrhœa, though often associated with infecundity, does not necessarily cause it, and the reason of the association is probably purely a mechanical one. The cause which prevents the easy escape of the menses, and renders it painful, may equally prevent the access of spermatozoa to the uterus, tubes, and ovaria. To these we shall presently advert.

But these are not the only causes for infecundity on the part of the woman. There is another and a principal one, to which passing allusion may be found in authors, but it has by no one been so markedly assigned and scientifically considered as by Donné, and our countryman Dr. Sims, to whom Surgery and Science are alike both deeply indebted.

I allude to the *destruction of the spermatozoa*, by the vitiation or peculiar constitution of the vagino-uterine secretions, by which fecundation is rendered impossible.

In Donné's "Cours de Microscope," etc., the work of a zealous, cautious, and candid observer, we find much that is interesting and important on this subject. Acetic acid instantly kills the spermatozoa, but leaves them perfectly intact for years. Blood and milk exert upon them no deleterious influence, saliva kills them rapidly, urine instantly. Pus and the *muco-purulent matter of uterine leucorrhœa* does *not* affect them by its contact. They live perfectly well in the mucus secreted by the vagina in a normal state, which is slightly acid; but, and this observation is most important, the ascidity of the mucus secreted by the vagina becomes such, in some circumstances, as when there is congestion, acute irritation, or inflammation of this organ, that the zoospermes *seem unable* to live in it more than a few moments. He has even seen them, particularly, give no sign of life, in less than two minutes, in the vaginal mucus of a woman of 22, affected with an extremely acid discharge. "Can this, then," Donné says, "be considered as the cause of sterility in some women?"

Vaginal mucus is white, opaque, creamy, not viscid, and

always *acid*. *Uterine* mucus, on the contrary, is transparent, stringy, tenacious, like albumen, sometimes clouded with purulent matter, but always *alkaline*, turning litmus paper blue, whilst the mucus of the vagina always reddens it.

The action of this (uterine) mucus on the animalcules varies according to circumstances. Generally the spermatozoa brought into contact with uterine mucus do not suffer. But *certain kinds of uterine mucus* kill the animalcules with the greatest rapidity. Nor is this mucus distinguished from others by any appreciable characteristic, microscopic or otherwise, being either pure and transparent, or opaque. An excess of alkali seems to be the only probable cause of its deleteriousness, litmus paper becoming instantaneously intensly blue.

No possible means of ascertaining the fact seems to exist, except that of submitting the spermatozoa to the action of uterine mucus of various kinds or qualities. "Do not," says Donné, "the facts related lead to the belief that alterations of the vaginal and uterine secretions play an important part in causing sterility, by killing the fecundating liquid; and is not some light thrown on its hitherto obscure causes, and a suggestion made of a rational and efficacious remedy?"

It is but doing simple justice to our countryman, Dr. J. M. Sims, to say, that he is the first among us to revive those ideas, and give to them a practical application (On Mic. in Diag. and Treat. of Sterility, *N. Y. Med. Jour.*, Jan., 1869). In this paper he lays it down: 1st, we must have spermatozoa in the semen; 2d, they must enter the utero-cervical canal; 3d, the state of the secretions must be favorable to their vitality. In the absence of the second of these conditions only is any operation to be thought of. How are these facts to be ascertained? By examining the condition of the vaginal and uterine secretions after coition. A little of each is to be withdrawn with a syringe, and placed under the microscope; and to do this accurately, the fluid must be retained for some time after in the vagina. He thinks the best period for making the investigation is the fifth or sixth day after the menstrual flow. Dr. Sims, in one respect, differs from Donné. He says, "the vaginal (normal) mucus, by its natural acidity, kills very quickly *every* spermatozoon, and seems to be a perfect poison for the superabundant ones." If this were true, fecundation would very seldom, almost never, occur. Donné, more correctly, I think, says, its slight natural acidity is not noxious to the spermatic animalcules, *but is only so when excessive*. The cervical mucus is to be carefully separated and distinguished from the

vaginal, and withdrawn with a syringe for examination. Dr. S. thinks it possible to obtain a second specimen from higher up the canal, or even from within the os internum, which I should think would be difficult, and finds in the one sometimes living, in the other dead spermatozoa. Donné does not carry his researches so far. He is content to take the mucus which hangs out of the os externum, or can be withdrawn from within the neck. Dr. Sims thinks that if the cervical secretion contains little opaque spots of milky whiteness, and when it is very thick and albumino-purulent (as also when perfectly clear), it is poisonous. Donné's observations *generally* (p. 293) oppose this assertion:—*A certain quantity of mucus is necessary to produce this effect*, which cannot be told from its natural or microscopic appearances—too *alkaline* (?) if uterine; *too acid* if vaginal. Be all that as it may, there is a peculiar condition of either of these secretions, whatever it be which does kill the spermatozoa, and occasion sterility; and the great point is to remedy it. Dr. Sims justly says, it is not every woman who has dysmenorrhœa (and I add, or leucorrhœa), who is sterile, nor every man who may be vigorous and enjoy good health, who is capable of procreation. He has known half-a-dozen husbands—in one place he says many—whose semen had no spermatozoa. Dr. Sims' paper proves and he frankly acknowledges, that the operation of incising the cervix is seldom necessary or proper, often quite uselessly performed; and he no longer thinks that the most common obstacle to conception is a more or less contracted utero-cervical canal (p. 24, lib. cit.) I quite agree with Dr. S. that the necessary investigations into this interesting and practical subject, by which alone a true and scientific knowledge and basis of action can be obtained, involve neither indecency nor sacrifice of self-respect on the part of either surgeon or patient.

If, then, it should be asked, what necessity then exists for dilating the two orfices and neck of the uterus, we answer, 1st, because of its allowing a more easy escape for the menstrual blood; and 2d, because it allows an easier access to the spermatozoa. Although neither an aggravated dysmenorrhœa, nor a very contracted os uteri, internum or externum, are necessarily fatal to, they are unfavorable to impregnation, and should, as a part of the treatment, be remedied. I cannot, for my own part, imagine that flexions, however great, of a part so short and so flexible as the neck of the uterus, which are so readily restored by the introduction of a long and suitably-sized speculum, and which, moreover, I so seldom encounter, can offer any

serious impediments to fecundation. But the contractions of the orfices are real and unmistakable, often obstinate, and contribute, I doubt not, to this result; but even then very partially, for, as Dr. Sims justly observes, cases are recorded where conception occurred when the os barely admitted a small-sized probe, and that spermatozoa now and then pass along the Fallopian tubes, which ordinarily admit a bristle. It is, then, to the state of the vaginal and uterine secretions, the semen being healthy, that we must look for the great cause of infecundity in the female. The remarks of Joulin on this subject are worthy of repetition:—"The contraction which has its seat at the internal orfice of the uterine neck is one *of the most common causes of infecundity;* and particularly among multiparæ. But women who have borne children sometimes exhibit this disposition, which oftenest coincides with an extreme narrowness of the neck of the womb and imbrication of the folds of the *arbor vitæ*. This cause of sterility which is usually accompanied with the phenomena of dysmenorrhea, was until lately unknown.

"The treatment consists in dilating the constricted region. I prefer a cylinder of prepared sponge, small to begin with. I have obtained 2 successes with this proceeding;" Becquerel 4, and Meisteler 7, out of 9; McIntosh 24 out of 27, 11 of whom bore children; and Corty several followed by conception (410). This certainly shows that, although closure of the uterine orfices does not necessarily prevent, dilatation exerts a considerable influence over the subsequent fecundity of the patient.

"The first sponge," says Joulin, and Corty repeats him, "does not pass through the internal orfice; each one penetrates a little further than the first, and simply dilates the neck; but later, the inner orfice becomes permeable. The sponge applied swells immediately, and the woman can attend to her business without feeling the least inconvenience." This is only partially true. It sometimes produces pain and irritation within 24 hours, and requires removal. I once saw frightful results from the thrusting of a sponge-tent into the uterine cavity. Corty says an interval of 2 or 3 days should elapse between each introduction. Joulin says, if not removed, generally about the 3d day a discharge takes place of a clear, abundant, *fetid* fluid, which disappears on its removal. "I renew" he says, "these applications twice a month—10 days before and after menstruation. When the dilatation is sufficient, I suspend their introduction, and recommence if the stricture tends to reappear, for often the amelioration is only temporary. It supplants the incision, which, unless the sponge-tents are used simultaneously, cica-

trizes and contracts, leaving things as they were. It is simpler and less dangerous, and women, at least, if they have not patience to follow out the plan, *are often relieved of their dysmenorrhœa.*" "Uterine deviations," says Joulin, "are not causes of sterility, for the semen need only to be deposited in the vaginal cavity, not projected into the os. Unless, then, when very intense, and the angle of flexure very great, displacements of the uterus do not offer any serious obstacles to conception." Tents of sea-tangle (*Laminaria digitata*) are preferable to prepared sponge, because they can be longer retained without producing irritation and fetid discharge, and do not rot and break; but I do not find them as easy of introduction. Corty repudiates them.

Other means of dilatation are employed. Dr. McIntosh used flexible metallic bougies. Bennet prefers wax or gum-elastic bougies to metallic ones. Simpson uses metallic stems of graduated sizes, left in the uterus for various lengths of time, and sometimes changed daily for days together, or left in permanently. With the gum-elastic French bougie, fine or olive-pointed, varying in diameter above the point (bougie à ventre), all my own successes have been attained. Generally, the point reaches to and strikes firmly against the os internum, and irritates it spasmodically. After a time, if not too large, with a little management, it enters the stricture and passes up to the fundus with little or no pain. The next time, again, perhaps, nothing will pass, and so on, until sufficient dilatation is effected to admit a larger size. Sometimes, on the same day, one bougie, after remaining in a little while, may be withdrawn, and a larger one passed, but not often. Strictures of the os internum uteri, like strictures of the urethra in the male, are irritable and capricious, and must either be coaxed or taken when in good humor. If it is going in, the bougie must pass in quickly, almost precipitately. I think I understood Dr. Kammerer to say that he also made use of steel bougies of graduated sizes. All I have to say about this is, that safe as these may be in skilful hands, and successful—they have not been so in mine—they cause pain, and, I think, excite irritation and spasmodic contraction in the upper os, which makes it difficult to pass them through it; and if pushed in forcibly, might, I should think, do mischief. I can conceive of cases in which it might be necessary to incise the outer os, or to dilate the cavity of the neck with sponge or laminaria, in order to introduce the bougie; but when a hysterotome of any kind, a sponge-tent or slip of laminaria can pass, a slender-pointed, flexible, gum-elastic bougie, I

should think, could be passed also, and with time and patience effect the object. Try to learn the course of the stricture, pass in the bougie in it, firmly and quickly, through the os, *au fond.* If it means to go, it will then, and may be retained for a longer or shorter time. I believe it would be well to leave it in for some hours. If you do not succeed after a short trial, suspend the operation till a later day. If the stricture is, or becomes irritable, the more you try, the less likely you are to succeed. Success is either null or immediate. When complete dilatation has been obtained with a bougie of large size, the passage of it becomes easy, but it must be repeated at intervals; after menstruation; perhaps best in the true inter-menstrual period (10 or 14 days after), for if the woman should happen to have conceived, abortion would almost inevitably follow the introduction of the bougie into the uterine cavity. The bougie should be new, firm, and not too flexible, or it will double up and not pass. Bougies that have been used many times are liable to this objection. If, after withdrawing the bougie, a laminaria tent could be introduced, and left *a demeure* some days, it would be well: but it is not easy or always possible, and the bougie alone must be depended upon.

All these operations have for their object the facilitation of the escape of the menses and removal of dysmenorrhœa, and the allowing of an easier and freer entrance to the spermatozoa. But beyond this is the aid afforded to methods intended to effect the change in the uterine secretions necessary to insure the vitality of the spermatozoa. If this cannot be done, our researches and conclusions upon this point in the pathology of sterility will be of no avail. It is to be effected, as far as I know, by cauterization, chiefly with nitrate of silver, introduced in the solid form, or by injection, into the cavity of the neck and uterus; although other substances are employed. Dr. Sims' pamphlet is unfortunately silent on this point. Corty ranks among curable causes of sterility, simple or complicated imperforation, congenital or accidental narrowness of the uterine orifices, the frequent cause of mechanical dysmenorrhœa; and says by dilatation and double incision of the neck, he has obtained unquestionable cures of more than 15 sterile women, whose fecundation followed the treatment in from 3 to 15 months. Flexions, when very decided, are causes of sterility, and incurable when held down by adhesions; and he does not partake of the opinion of M. Joulin, on the small importance of deviations of the uterus as causes of sterility. He thinks that the glans penis should, at the moment of ejaculation, be oppo-

site to the meatus uterinus; and that even a temporary restoration to the natural position (p. 1008) suffices sometimes for fecundation; and that after this, and after dilatation even, no time should be lost in attempting fecundation, and that certain positions of *the female in coitus* are preferable in some cases to others. Hypertrophy even of one lip, and conicity of the neck, congestion, inflammation, granulations, and fungosities are all obstacles to fecundation. This appears to be also the opinion of Kammerer, and of C. Mayer, of Berlin (1856), whom he cites in his paper.

In Dr. K.'s patients, retroversion (20), anteversion (18), anteflexion, (83), retroflexion (71), hypertrophy (65), small os (24), stricture of internal os (35), were the commonest lesions, and $\frac{7}{8}$ths of the whole number were affected with some form or other of uterine catarrh. If the views which I have herein presented, relative to the occasional and frequent destructiveness of the accompanying secretions to the spermatozoa be correct, some of the sterility in them may be fairly, I think, attributed to it, and some of the successes to the means employed for its removal. Corty thinks that very abundant leucorrhœal secretion may expel the semen from the uterine cavity, when it has once entered, and the very viscid, tenaceous mucus which plugs the os oppose its entrance.* Vaginal, he thinks less injurious than uterine mucus, the latter of which may have a very injurious influence upon the relatively very small quantity of sperm which enters the uterine cavity (1012). He adds:—In a great number of cases the great abundance of the leucorrhœa, and even its purulence, does not prevent fecundation.

Corty differs from Joulin as to the effect of a want of orgasm on the part of the female. He thinks it may occur without being felt or expressed, that it is capable of development and education, and hence fecundation seldom occurs until after some months (12, 18, 24 and 36) of married life; again, in some cases of sterility, coinciding with perfect general health of the genitals, and only attributable to absolute defect of orgasm, even in women very desirous of becoming mothers; or awaking, together with fecundity, after a lapse of years, and thence pursuing the natural course of its evolution; a new lover, or husband perhaps, determining the result. But it is equally certain that many entirely cold and passive women are extremely fecund. Sterility, on the other hand, may depend upon a totally opposite condition. Menorrhagia (a precocious abortus),

* Sometimes the semen is all instantly thrown off by the vagina, by too soon rising after coitus (Sims 12).

or inter-menstrual menstruation, by its tendency to reproduce itself when the ovum is recently fecundated, becomes an obstacle to gestation. The number of causes, single or allied, upon which sterility may depend, should certainly render us sober of promise to women in whom it is only relative, and affords hope of recovery; while the very frequent realization of that hope, under well directed treatment, should warrant, I think, a patient and continued effort on the part of both patient and physician.

Among the chief means of correcting the morbid conditions of the uterine mucous membrane upon which noxious secretions may depend, may be said to be cauterizations of the mucous membrane of the neck and cavity, and certain intra-uterine injections. The caustic most commonly in use is nitrate of silver, used externally to ulcerations and abrasions of the neck, and internally applied to the mucous membrane of the neck and cavity, to repress granulations and fungosities, to diminish hypersecretion, and by modifying the morbid condition of the glands which produce leucorrhœa, change the character of the secretion itself into one less injurious to the vitality of the spermatozoa. Upon this subject M. Corty says:—"The cauterization may be performed, after dilatation, with a camel's hair brush, but as this is an unenergetic method, the idea has arisen to introduce the solid nitrate and apply it directly over the surface."

Various porte-caustics have been devised for this purpose, intended to secure the caustic from being broken off within the cavity. "But" says M. C., "having myself met with the accident and satisfied myself not only of its harmlessness, but of its happy results, I fix a piece of solid nitr. of silver, of suitable length, in an ordinary platinum porte-nitrate with a long handle; place the patient in supination; introduce a wooden speculum; examine very gently with a sound the direction of the utero-cervical canal, and immediately after carry the crayon of nitr. silver even into the uterine cavity." This is easily said, but is it quite as easy to do? M. C. continues: "Instead of endeavoring to withdraw it intact, I use, on the contrary, all my endeavors to precipitate it, to break it off, which is not very easy to do, and I abandon it in this cavity (p. 265). The vagina is then tamponed with a cloth, wetted in a solution of salt in water, sustained by a second one, and the speculum withdrawn." "I can say," he adds, "that I do not know any more heroic means that this *little* operation, which it is not often necessary to repeat, in the treatment of obstinate leucorrhœa. I have not observed serious accidents to follow it. Once only I saw atrocious pains, not yielding to baths, antispasmodics, nor

narcotics." The neck having swelled, and the os being occluded, he incised it some hours afterwards, to facilitate the expulsion of the mucus and caustic itself. In all the other cases, the pains, "even very strong in a small number of women," have always yielded, however violent, to general and local antispasmodics, and to cool hip baths, with continuous vaginal irrigations, prolonged if necessary for several hours.

Those of my readers who may feel disposed to adopt this heroic and comparatively innocuous and "incomparable" little remedy, 619, will do well to consult M. Corty's Traité Prat., &c., Paris, 1866, p. 264 & 7, 618. It is to be employed only, be it remembered, when the passages are freely pervious, and there exists neither metritis, perimetritis, ovaritis, flexion, deviation, stricture, nor constriction of orfices.

M. Corty is not in favor of intra-uterine injections. He says that they are the most dangerous that can be employed, and has seen them instantly followed by very formidable accidents, to say nothing of the possibility of their passing through the tubes into the peritoneal cavity and giving rise to fatal peritonitis. M. C. uses no other fluid than pure water, and even then only where there exists a perfect facility for the escape of the injected fluids.

Dr. Jas. Kammerer, of this city, whose paper on Uterine Catarrh, reprinted from the *Am. Journ. of Obs.*, vol. ii., No. 2, August, 1869, I have just been favored with, is a warm advocate, on the other hand, in their behalf, and uses them constantly with safety and success. When catarrh is accompanied with true angular anteflexion, the posterior lip of the uterus must be incised by Emmet's operation, to straighten the canal and provide for a free exit for the catarrhal secretion; and extreme smallness of the external os requires a bilateral incision. The patient being placed in a recumbent position, a sound is introduced into the uterus, and the depth, capacity of the cavity, and the mobility of the organ accurately measured and ascertained. A cylindrical speculum is then introduced into the vagina. In order that an entire permeability of the cervico-uterine canal shall exist before the injection is attempted, Dr. K. is careful to dilate it by means of a series of sounds, four in number, of varying sizes, made of copper or German silver, of which exact figures are given on pp. 14 and 15 of the pamphlet alluded to. These are successively introduced through the speculum, until full dilatation of the canal is obtained; after which injection and escape of the injected liquids are easy and safe. After washing out the cavity of the uterus with a long-nozzled India-rubber bag syringe, the appropriate remedy, in

liquid form, is injected. These are chromic acid, Lugol's sol. of iodine, dilute or concentrated, and carbolic acid diluted, and also sulph. zinci, 10 grs. to the ounce. Of carbolic acid as an intra-uterine injection, I find no notice in the three French works I have consulted, Joulin, Corty, and Becquerel, and do not know with whom it originated.

Dr. Squibb, in a recent pamphlet, speaks of it as a mild local anæsthetic, useful in cystitis and leucorrhœa, and says that its use has often been favorably noticed in the foreign journals. Weak solutions of these dilute substances may be freely injected, raised to a certain temperature, not cold; but of the concentrated, 10 to 20 drops is the most that can be safely injected, the dilute being in ordinary cases the most prudent. Caution and skill are necessary; for Dr. K. himself allows (p. 23) that accidents may occur occasionally, notwithstanding the most careful observance of the rules he has laid down (p. 12). Dr. K. observes that he has often cured patients of their catarrh, as well as their sterile condition; but the peculiar morbid action of the secretions upon the spermatozoa, to which, in this paper, I have endeavored to direct attention, is not, so far as I have observed, alluded to. Dr. K. remarks that a new cause of sterility, hitherto little attended to, may be a destruction of ciliary uterine epithelium from the too powerful application of escharotics. The direction of the cilia, however, is from, and not toward the uterine cavity. There can be no doubt of the safety and efficacy of intra-uterine injections in Dr. K.'s experienced hands, and many cases are cured by it no doubt, which would resist any other mode of treatment. Dr. K. looks upon uterine catarrh as the most frequent cause of sterility in the female, having met with it in 342 cases out of 408, but without assigning any reason.

The womb in the present state of uterine therapeutics, must be looked upon as a meek and long-suffering organ, which endures with wonderful patience the rough handling, the burnings, slashings, pokings, and scrapings it receives at the hands of the gynæ-atrics. Still gentleness and caution are necessary; for it does not *always* submit to them without resistance, remonstrance, or recalcitration.

If these remarks shall conduce to a better study and understanding of the causes of sterility, and a more successful treatment for its removal, my object in writing them will be happily attained. The action of the vagino-uterine secretions upon the spermatozoa, will soon, I have no doubt, become an interesting and important specialty, and, I trust, will receive speedy and due attention.—*N. Y. Med. Record.*

ARTIFICIAL MINERAL WATERS—Kissingen.

By R. ROTHER.

The numerous inquiries concerning methods for preparing artificial mineral waters, and the recent attempt of some chemist to furnish the necessary information, together with the growing demand for this luxury, all concur that a commentary upon this interesting subject would not be out of place. As a type of this class of preparations, Kissingen Water was chosen, since the apparent difficulty attending its production, and the high esteem in which it is held, but especially as constituting the topic of an anonymous chemist of the *Druggists' Circular*, make it a point of some interest to the writer.*

That contributor's elaborate and practically impossible process leads to the supposition of being a manufacturer's device, to divert attention from, and further monopolize, the industry of mineral waters; but the indescribable syntax, and worse chemistry, in fact, the total process is so awkwardly exhibited as to betray nothing of the necessary shrewdness usually so characteristic of such an enterprise. The flattering enconium upon the "celebrated Liebig" is cast into ridiculous contrast, when viewed in connection with the author's formula, which, as he states, is to represent Liebig's analysis of the Rakoczy Spring. If it was the design of the author, prompted by a generous impulse, to benefit unassuming enquirers, he should have considered that few can comprehend the abstruse chemical mathematics he lays before them, and that whoever could complete his dubious process would certainly possess the requisite ingenuity to devise a working formula from the original data of the analyst, without soliciting his intervention.

At the present time, the great bulk of artificial mineral waters consumed is furnished by a class of manufacturers who make its fabrication a specialty; each producer claiming for his preparation merits peculiar of its own, representing it as identical with the natural article, but manufactured by entirely original methods, only known to themselves. The retail vender thus obtains his mineral waters in concentrated solution, which, according to manufacturer's direction, is mixed with more water, and the dilute solution impregnated with carbonic acid, under pressure. This is, evidently, a great convenience to those who are not aware of a more economical, but, above all,

* *Druggists' Circular*, July, 1869.

reliable source. What guarantee exists for the correctness of the manufacturer's statement, whose selfishness prompts him to conceal his process? Does the confiding retailer know that the manufacturer's solutions, No. 1 and No. 2, contain *all* the necessary constituents of the mineral water they are to represent? Certainly not, unless he has verified it by analysis, quantitatively as well as qualitatively, which would be an ungrateful task at best, since he has an unquestionable guarantee in the original statement of the analyst who grants it for his love of science alone.

It seems that Liebig's analysis is now usually adopted as the basis for the various methods of preparing Kissingen Water, which, as calculated for the wine pint, or 16 fluid ounces, is stated to contain of solid anhydrous matter and ammonia, as follows:—

Chloride Potassium,	2.2034	grains.
Chloride Sodium,	44.7133	"
Bromide Sodium,	.644	"
Nitrate Soda,	.0715	"
Chloride Lithium,	.1537	"
Chloride Magnesium,	2.3331	"
Sulphate Magnesia,	4.5088	"
Carbonate Magnesia,	.1309	"
Sulphate Lime,	2.9904	"
Phosphate Lime,	.0431	"
Carbonate Lime,	8.1482	"
Carbonate Iron,	.2425	"
Silicic Acid,	.0991	"
Ammonia,	.007	"

This analysis differs materially from those of some other chemists who have also examined this water, not so much in the total amount of its constituents as in regard to their chemical character and relative quantity; but this is, in some measure, due to the remarkable fluctuations that, from time to time, occur in the composition of some of the mineral springs.

Kastner's analysis is expressed in quantities representing a Bavarian pound, of 16 ounces, or 7680 grains, equal to 560 grammes. The gramme being 15.434 grains Troy, this, by calculation, would then indicate the amount of mineral matter in 8643.04 Troy grains. The slight deviation in the specific gravity of this water above the unit of comparison being practically inappreciable is here left out of consideration. The ratio existing between this bulk (8643.04 grains Troy) and the wine pint (7291.2 grains), when the former is unity, is .84359;

this number will then be the coëfficient of the formula when reducing Kastner's result to the wine pint standard.

The presence of an important ingredient, the chloride of lithium, existing even in proportionably large quantity, as found by Liebig and Bauer, was entirely overlooked by Kastner. Liebig also finds a portion of nitrogen in the condition of nitric acid as nitrate of soda, while Kastner found it only as ammonia. The latter chemist also finds much greater quantities of phosphoric acid and protocarbonate of iron, together with alumnia in abundance, but his amount of silicic acid is comparatively enormous. The bromine agrees with, and the chloride of potassium is but half, that of Liebig, yet the remaining and most important components agree within practical limits.

The discrepancies in the analysis of this water evidently occur, then, only among the rarer and least important elements of its composition. The various analysis may, therefore, be considered as identical, when referred to their characteristic bearing upon the main result. This is verefied by the circumstance that Kissingen, made by Kastner's formula, is of the first quality; but since its iron, phosphoric acid, and especially silicic acid, are in excessively large proportion, and the lithia wanting, Liebig's analysis gains the preference. However, this formula, when followed, as indicated by its combination of the elements, yields a result far inferior to that of Kastner.

This is based upon the remarkable fact made apparent by Kastner's distribution of the acids and bases, that sulphate of soda, when not added as such, is not generated in the process, and, consequently, an unpalatable product is the result.

The presence of alumina also exercises a curious influence by concealing the metallic flavor of the iron compound, which, otherwise, is disagreeably perceptible, as with Liebig's formula, where alumina is practically absent.

In offering a working formula for artificial Kissingen Water, the objects in view are simplicity in practice and accuracy in result; a process which, in the hands of even the moderately skilled, shall offer no obstacles to ready execution, and whose constituents shall be within the reach of every pharmaceutist. These are all points not observed by our Brooklyn contemporary, who, very probably, never tested his own process, and, taking his remarks at par, it is very questionable whether he ever tried any other.

Liebig's formula presents only chloride of sodium and nitrate of soda that enter the solution as such; the remainder are

brought into it indirectly, resulting from double decompositions between other compounds. This is also true in regard to a portion of the chloride of sodium. Thus, in the working formula, 100 pints are taken as a convenient quantity, that being the capacity of a large fountain. We now assume that the 13.09 grains of protocarbonate of magnesia ($MgO\ CO_2$) (Liebig's number 100 times) reacts with 21.19 grains of sulphate lime ($CaO,\ SO_3$), forming 15.58 grains of carbonate of lime ($CaO,\ CO_2$), and 18.7 grains of sulphate of magnesia ($MgO,\ SO_3$). This decreases the sulphate of lime to 277.85 grains, and increases the carbonate to 830.4 grains, and the sulphate of magnesia to 469.58 grains, while the carbonate of magnesia disappears. This is merely a consolidation to simplify the formula.

For reasons as above stated, Liebig's formula is infringed upon and Kastner's 18 grains of alumina inserted. This determines another complex reaction; 18 grains of alumina are represented by 166.27 of potassa alum. The latter, when decomposed by 78.18 grains of chloride of calcium, and 118.68 grains crystallized carbonate of soda, in succession, yields the alumina, together with 26.08 grains of chloride of potassium, and 61.33 grains of chloride of sodium.

The ammonia is generated as carbonate from 2.2 grains of chloride of ammonium and 5.88 grains of carbonate of soda, 2.41 grains of chloride of sodium also being produced. The employment of bicarbonate is not advisable. It is at best rather indefinite, and not an article of commerce unless prepared from the sesquicarbonate, by exposure to the air. Moreover, it cannot be kept in concentrated solution with the other alkaline salts without incurring loss.

Protocarbonate of iron is obtained from protochloride (first formed by double decomposition between 58.12 grains of protosulphate of iron (crystallized), and 23.25 grains of chloride calcium) and 59.79 grains of carbonate of soda, giving rise to 24.46 grains chloride of sodium.

Phosphate of lime ($3\ CaO,\ PO_5$), together with 4.88 grains of chloride of sodium is produced from 9.96 grains of crystallized phosphate of soda and 4.63 grains of chloride calcium. If the compound $3\ CaO,\ PO_5$ is formed, one equivalent of chlorhydric acid must be simultaneously set free. This would instantly react upon the carbonated bases, with the formation of an equivalent of chloride which is not accounted for in surplus of carbonates.

Chloride of lithium is formed when 13.38 grains of carbonate

of lithia and 20.07 grains of chloride of calcium react upon each other.

Chloride of lithium is very delinquent, and, hence, indefinite; it is, also, of unfrequent occurrence in commerce, whilst the carbonate is definite, stable, and everywhere obtainable.

Bromide of sodium is supposed to be generated along with 46.65 grains of chloride of potassium, when 74.47 grains of bromide of potassium and 36.58 grains of chloride of sodium are brought in contact, in solution. Bromide of sodium is rarely found in commerce, and the cubical anhydrous never, as these crystals only form at a very low temperature. The bromide of sodium crystallizes, at ordinary temperature, in oblique, rhombic prisms, containing four equivalents of water.

The introduction of the silicic acid offers some difficulty, but the commercial solution of silicate of soda having, usually, a uniform specific gravity is sufficiently accurate, examples examined ranging from 1.384 to 1.388. 104 grains of a solution of the latter specific gravity yielded, after repeated evaporation in contact with chlorhydric acid, 25 grains of silicic acid (SiO_3). The residue, by evaporating the filtrate, weighed, after fusion, 21 grains. This 21 grains of chloride of sodium corresponds with 11.128 grains of anhydrous soda (NaO). The solution then contains 36.128 grains of anhydrous silicate of soda, equal to 34.74 per cent.

To determine the formula of this silicate, we have the formula of soda NaO=31, and of silicic acid SiO_3=45. The quantity of oxide of sodium divided by its equivalent is 11.128÷31=.359; likewise for silicic acid we have 25÷45=.556. The composition is, therefore, .359 equivalents of NaO to .556 equivalents of SiO_3 or .359 : .556 :: 2 (NaO) : 3.1 (SiO_3). That is 2 NaO, 3 SiO_3. Hence sesquisilicate of soda.

14.46 grains of the anhydrous, or 41.31 grains of the solution of silicate of soda accord with 21 grains of crystalized carbonate of soda.

Sesquibasic silicate of soda (3 NaO, 2 SiO_3) is not found in commerce. It is crystalline and indefinite, containing variable quantities of water.

Of the 220.34 grains of chloride of potassium, 72.73 grains have previously been accounted for. The remaining 147.61 grains are supposed to be produced from 172.34 grains of sulphate of potassa and an equivalent quantity of chloride of magnesium.

However abundant chloride of potassium may be in some localities, there is, as yet, no universal demand for it, and,

consequently, it is rarely seen. It is also quite deliquescent.

Carbonate of lime is introduced by means of 921.74 grains of chloride of calcium, and 237.94 grains of crystallized carbonate of soda, 971.57 grains of chloride of sodium resulting as a by-product.

Sulphate of lime is furnished by the action of 226.78 grains of chloride of calcium upon 657.85 grains of crystallized sulphate of soda, while 239.03 grains of chloride of sodium are formed.

The exhibition of the magnesian compounds present the most difficult feature, forming, as is apparent, a complexity of the most intricate kind. This, therefore, determines a process by appearance equally comples; but the obstacles are overcome with success, by a subdivision into several phases, independent of each other. 469.58 grains of anhydrous sulphate of magnesia are formed, by assuming that the chloride of magnesium, first obtained by decomposing 962.64 grains of crystallized sulphate of magnesia with 434.36 grains of chloride of calcium, reacts with 172.34 grains of sulphate of potassa and 941.5 grains of crystallized sulphate of soda, giving, as collateral product, 147.61 grains of chloride of potassium and 342.1 grains of chloride of sodium. 233.31 grains of chloride of magnesium results by the mutual decomposition of 604.15 grains of crystallized sulphate of magnesia and 272.61 grains of chloride calcium.

Chloride of magnesium, with 6 equivalents of water, is obtained with difficulty as a very deliquescent crystalline mass, when the solution is evaporated at a moderate heat. Its use is, therefore, practically out of question. The fused anhydrous chloride, were it a commercial article, would, no doubt, answer the purpose, providing its cost was no objection. This is prepared, according to Liebig, by fusing in a platinum crucible the residue left by evaporating a solution containing chloride of ammonium, until the latter is expelled, and the mass in tranquil fusion.

Fused chloride of calcium is used in this process, as the crystalline chloride, with 6 equivalents of water, cannot be readily obtained or employed, on account of its extreme tendency to deliquesce.

From the previous preliminary explanations it will be seen that the carbonate of lime, of the lithia reaction, together with the sulphate of lime that results in various double decompositions, with the exception of that generated by a portion of the sulphate of soda, does not enter the mineral water. It is also

apparent that the total amount of sulphuric acid is introduced in the condition of sulphates of potassa and soda, 172.34 grains of the former, and 1599.35 grains of the latter. All the magnesium as chloride, obtained from 1566.79 grains of crystallized sulphate of magnesia, all the calcium as chloride, and all the carbonic acid, in combination to protocarbonates, as 2538.29 grains of crystallized carbonate of soda.

The process is now effected by first bringing the entire constituents into simple concentrated solution in two separate parts, designated as "earthy solution," or No. 1, and "alkaline solution, or No. 2. Process No 1 is accomplished in two sections, "*A*" and "*B*," and the course of proceeding takes place as indicated in the following condensed formula:—

EARTHY SOLUTION—(No. 1.)

"*A*."

Chloride of Calcium (fused), -	1981.62 grains.
Carbonate of Lithia, - - -	13.38 "
Water, sufficient.	

"*B*."

Crystallized Sulphate of Magnesia, -	1566.79 grains.
" Potassa Alum, - -	166.27 "
" Protosulphate of Iron, -	58.12 "
Chloride of Ammonium, - -	2.2 "

ALKALINE SOLUTION—(No. 2.)

Chloride of Sodium, - - -	2862.13 grains.
Crystallized Sulphate of Soda, -	1599.35 "
" Carbonate of Soda, -	2538.29 "
Nitrate of Soda, - - -	7.15 "
Crystallized Phosphate of Soda, -	9.69 "
Solution of Silicate of Soda, sp. gr. 1.388 (containing 14.46 grains, 2 NaO, 3 SiO_3), - - - -	41.31 "
Sulphate of Potassa, - - -	172.34 "
Bromide of Potassium, - - -	74.47 "
Water, sufficient.	

Fractions of a grain above ½ may be considered 1, and less than ½ may be rejected.

Dissolve the chloride of calcium in 12 fluid ounces of water, by trituration, in a mortar, or in a porcelain dish, with heat; to the solution add the carbonate of lithia, and agitate the mixture, then pour the whole into a wide-mouthed bottle, of the

capacity of two pints. Dissolve in another vessell, or in the first one, after washing the ingredients of "*B*," namely: sulphate of magnesia, potassa alum, protosulphate of iron, and chloride of ammonium, with one pint of water, and add this to solution "*A*," at once, and in one quantity, the resulting mixture, when the operation is properly managed, will remain clear a few moments, then, gradually, the sulphate of lime separates as a crystalline powder (not amorphous); after five or ten minutes, the whole is thrown on a muslin strainer, and the liquid pressed out with some considerable force; the hard crystalline residue of sulphate of lime, with some carbonate, is then moistened with six or eight fluid ounces of water, and again wrung out. The nearly clear solution thus obtained will measure about two pints, and may be filtered, if desirable, which, however, is altogether superfluous. This constitutes solution No. 1.

The chloride of sodium (pure and perfectly dry), is now dissolved in 1½ pints of water, with frequent agitation. The sulphates of potassa and soda, and the carbonate of soda (dry, but not effloresced), are together dissolved in somewhat less than 1½ pints of water, with the aid of heat; to this is added the chloride of sodium solution, and then the remaining salts, first dissolved in a few fluid ounces of water- This furnishes solution No. 2, measuring about 3 pints, which must be filtered.

Solutions No. 1 and No. 2, when added in succession to 12 gallons of water in a fountain, and impregnated with carbonic acid, under a desirable pressure, yield artificial Kissingen Water of unsurpassed quality. These results are based upon the writer's own experience, who has, during the past season, frequently manufactured this mineral water by the above process, in quantities of ten fountains at a time.

The writer, therefore, considers his duty done; let subsequent operators now do theirs.—*The Chicago Pharmacist.*

Book Notices.

The Physical Life of Woman: Advice to Maiden, Wife, and Mother. By Geo. H. Napheys, A.M., M.D.; Author of Compendium of Modern Therapeutics, etc. Philadelphia: Geo. McLean, 719 Sansom Street. 1869.

This is a neatly bound volume of 250 pages, written in a

plain and pleasing style, well calculated both to please and instruct. There is nothing of the *sensational* or imaginative character in it. On the contrary, its teachings are in strict accordance with scientific facts and good sense. Though designed specially for females, yet a careful perusal would be productive of much benefit to both sexes. Price $1.50.

A Course of Practical Chemistry, Arranged for the Use of Medical Students. By WILLIAM ODLING, M.B., F.R.S.; Fellow of Royal College of Physicians; Lecturer on Chemistry at St. Bartholomew's Hospital. With Illustrations. From the Fourth and Revised London Edition. Philadelphia: HENRY C. LEA. 1869. Pp 261. Price $2.

This is an excellent manual of practical chemistry, and is particularly well adapted to the wants of the medical student, who should regard a good knowledge of practical or analytical chemistry as a necessary part of his professional education. For sale by S. C. Griggs & Co., Chicago.

Reports on the Diseases of Cattle in the United States, made to the Commissioner of Agriculture, with Accompanying Documents. Washington, 1869.

We have received this volume direct from the Department of Agriculture, at Washington. It is an octavo volume of 190 pages, well bound; and contains a full and interesting report on the lung plague, or Texas cattle disease, giving its history, mode of spread, nature, and management, by Professor John Gamgee, M.D. The same author has two other reports; one on the "Ill Effects of Smutty Corn on Cattle," and the other "On the Splenic or Periodic Fever of Cattle." These papers occupy nearly 160 pages of the volume. The remainder is occupied by "General Remarks on the Cattle Diseases Reported on;" "Remarks on the Exodes Bovis," by C. N. Riley, St. Louis, Mo.; on "The Fungi of Texas," by H. W. Ravenal, of South Carolina; and a "Report of the Results of Examinations of the Fluids of Diseased Cattle, with Reference to the Presence of Cryptogamic Growths," by Drs. Billings and

Curtis, of the United States Army. All these are topics of very great importance, and are treated by men in the highest degree qualified for the work.

It is greatly to be regretted that the Commissioner of Agriculture was obliged to omit numerous and highly important illustrations for want of funds. We trust that among the first acts of the coming Congress will be an appropriation sufficient to meet the expenses of a new edition, with all the illustrations which the importance of the subjects treated require.

The Mechanism of Dislocation and Fracture of the Hip. With the Reduction of the Dislocations by the Flexion Method. By HENRY J. BIGELOW, M.D., Prof. Surgery and of Clinical Surgery in the Medical School of Harvard University; Surgeon of the Massachusetts General Hospital, etc., etc. With illustrations. Philadelphia: HENRY C. LEA. 1869. Pp 150. For sale by W. B. KEEN & COOKE, Chicago.

This is an elegantly published volume, containing a complete presentation of the present state of surgical knowledge, in regard to dislocations and fractures of the hip, with accurate illustrations. It is a valuable addition to the surgical literature of our profession.

Physicians' Visiting List for 1870—Nineteenth year of its Publication. Philadelphia: LINDSAY & BLAKISTON. Sold by all Booksellers and Druggists.

This pioneer still holds its reputation as one of the most convenient pocket visiting lists and account books that the physician can use. The copies for 1870 are issued, and in the hands of booksellers in good time.

Transactions of the Illinois State Medical Society; Nineteenth Anniversary Meeting, held in Chicago, May 18th, 19th, 20th, 1869.

This is a well printed volume, in paper cover, 160 pages. Besides the record of proceedings, it contains ten reports and papers of more or less interest and value, and a list of names of

members of the Society. Secretary, T. D. Fitch, M.D., Chicago.

Minutes of the First Annual Meeting of the Nebraska State Medical Society, held at Nebraska City, June 1st, 2d, 1869.

This is a very neatly printed pamphlet of 24 pages, containing the record of proceedings, and brief reports from the Society, the Publication Committee, the section on surgery, the section on obstetrics, together with a copy of the constitution and by-laws of the Society. It indicates a good spirit in the profession of this new State. Secretary, S. D. Mercer, M.D., of Omaha.

Editorial.

Medical Colleges.—The two regular medical colleges in this city are again in active operation. The Rush Medical College opened its annual session on the last Wednesday in September. The introductory lecture was delivered by Prof. E. L. Holmes, who had recently been appointed to the newly created Chair of Ophthalmology.

This lecture was well written, and his advice to the students well received. With the exception of adding one or two professorships, on special departments, this school still adheres closely to the old arrangement of short terms, single classes, and heterogeneous teaching.

The Chicago Medical College, Medical Department of North-Western University, opened its annual session for 1866–70, on the first Monday in October. The general introductory lecture was given by Prof. W. H. Boyd, recently appointed to the Chair of Descriptive Anatomy. The address was highly appropriate, and was listened to with marked attention. It will be found at length in another part of this number of the Examiner. This school, although requiring three courses of lectures, of six months each, a consecutive order of studies, annual exami-

nations, and some preliminary education, attracts an excellent class of students, and is practically demonstrating the feasibility of all the improvements in our system of medical education, recommended by the Convention of 1866, at Cincinnati, and so long demanded by the profession. No city in our country affords better advantages for the study of medicine in all its departments, didactically and clinically, than Chicago.

Items from the Gazette de Hospateaux, Translated by F. H. Davis.—*Gazette of September 4th.* * * * We are happy to hear that the cholera has completely disappeared from the Province of Bengale.

* * The Typhus has been raging terribly for the last three months in Erzerum. One of our colleagues, Dr. Delort, Sanitary Physician, appointed by the French Government, has died a victim to his admirable devotion.

Gazette, August 24th. The *Bulletin* of the Prefecture gave a mortality of 75 cases, from affections of the digestive organs, in Paris, during the last week; diarrhœa 61; cholera and dysentery 5. The number of cases has apparently diminished, this week the *Bulletin* not indicating more than 4 deaths by cholera and 48 by diarrhœa.

* * The cholera, which has been prevailing with great violence in the western part of Africa, especially in Gambie, has completely depopulated that English colony.

* * The total number of victims at Sainte-Marie de Bathurst is estimated at 1323, from a population of 4000 to 4500, composed almost entirely of negroes and mulattoes; of the 25 whites who formed the little European colony, *one* only has been attacked by the disease, and he has fortunately been saved.

* * According to the last advices, the epidemic of cholera, which had been reported as prevailing in India, was much diminished, and apparently disappearing.

* * According to the *Gazette Medica de Bohia*, the number of consumptives in Bohia has been increasing for some time at a fearful rate. The journal attributes this increase to the

imigration of foreign races, especialy the Germans, who have brought into Brazil the habits of *intemperance.*

When Brazil was colonized by the Portuguese alone, a race noted for their sobriety, tuberculosis was no more prevalent there than in Portugal. To-day the proportion is very different.

In mentioning the meeting of the Faculty of Medicine of Paris, held August 14th, the *Gazette* says:—"The standard of the students is not raising. This year, again, the Faculty of the three divisions of the Ecole pratique have not found a single student who merited a reward, or even a mention.

All the interest of the meeting was in the eulogy on Prof. Trousseau. M. Laséque has obtained the most legitimate success in committing to speech these remembrances. In listening, one could almost imagine that he saw again that grand and noble figure of a beloved master; and when he portrayed the last sufferings and death, all shared in the emotion which nearly suppressed his utterance with sobs.

"Oh no! it is not the students of the college who have changed. Restore to them their Trousseau, their Vulpean, and you will see that she has the same culture from them."

Prevention of the Spread of Cholera.—The French Government has sent Dr. Proust on an important mission to Persia. He is to explore the shores of the Caspean Sea, from Austrakan to Recht, with the view of ascertaining the local conditions which have caused the cholera always to follow that course, in extending from Persia into Europe; to study on the spot the measures taken by the Russian Government to prevent a fresh invasion of the disease, and to point out the means of more sure prevention.

The plan laid down for him is as follows:—After visiting St. Petersburg, and explaining the object of his mission, and being, perhaps, joined by a Russian physician, he will proceed to Austrakan, and visit the Russian quarantine establishments at that place. He will then explore the coast from Astrakan to Recht, and will thence proceed to Teheran. Having arrived in that city, he will impress on the Persian Government the necessity of carrying out the sanitary organization projected two years

ago, especially the regular performance of the duties of the Council of Health, which was formed at that time, but which has remained almost a dead letter. One of the most important objects to be effected will be to put a stop, especially during the prevalence of cholera, to the carrying of dead bodies in a state of putrefaction with the pilgrims' caravans. This mission of M. Proust is highly important and well-timed; especially as it was reported in the middle of last month that cholera was prevailing at Teheran, and that there was some danger of its spreading along the shores of the Caspian Sea into Europe.—*British Medical Journal.*

FOREIGN GLEANINGS.

M. Chairou has presented to the Academy of Medicine of Paris a memoir, having for its title "Clinical Studies upon the Nature and Coördination of Hysterical Phenomena."

The author is the Physician to the Asylum of Vésinet, and his conclusions, based upon his observations of the convalescents of that establishment, are expressed in the following propositions:

1st. Whenever, in a female, there is compression or inflammation of one or both ovaries, there is almost always a reflex sympathetic paralysis of the epiglottis and of all the organs constituting the pharynx.

2d. Whenever these two phenomena are found united in the same person, there is the beginning of a condition which the author calls the *hysterical cahexia.*

3d. The attack of hysteria is only the consequence of this reflex paralysis. The epiglottis fallen back over the superior orifice of the larynx cannot be raised by its muscular attachments and hence the attack of suffocation, the convulsive movements of the extremities and the general spasms constituting the hysterical convulsions.

4th. The asphyxia resulting from these repeated convulsions results necessarily in a perversion of vitality; and, as a consequence, those sensorial and anæsthetic disturbances almost always observed in hysterical patients.

5th. The treatment ought consequently to be addressed directly to the functional disorders of the ovaries; especially ought it to be local, to determine the resolution of the ovaries, the principal, if not the only, cause of the difficulty.

It is well-known that M. Auzias Turenne is an earnest student of the literature as well as the pathology and therapeutics of syphilis. In a note presented to the Academy of Medicine, at its meeting of September 7th, he expresses the following conclusions as to the origin of this disease in Europe. It is certain, according to M. Turenne, that syphilis, after having appeared in Spain, became epidemic first at Naples, in 1495, while that city was besieged by the French and defended by the Spaniards and Italians. The author discusses the different opinions as to its origin in Europe, and adopts that so well sustained by Astruc, and which regards it as an importation from America. In support of this opinion, he adduces three kinds of proof—historical, nosological, and philological. The historical proofs consist of the testimony of Oviédo, of Theret, and the circumstantial details furnished by Roderic Dias. The disease is followed chronologically and geographically from the West Indies through Spain to Italy, and thence to France, and its subsequent dispersion throughout the world.

The nosological proofs consist, 1st, in the well-known generalization and benignity of the disease in the West Indies, at the time of their discovery; 2d, in its march through Europe; at first insidious, then active and terrible, and, subsequently, gradually diminishing in its severity.

The philological proofs are, 1st, all the names of the disease and its symptoms are found in the Caribian dictionary and in the language of the Indians, to the exclusion of those of diseases which have been introduced into America by Europeans. 2d. the modern names of the disease are borrowed from the names of the people from whom each nation supposes it to have been derived. The Spanish called it the Indian Disease, the French, the Spanish Disease. The author, in accordance with his theories, already enunciated, concludes that the disease is of American origin, that its traditional treatment by mercury

should be abandoned, and that syphilis itself is its proper remedy and preventive.

The discussion in the French Academy upon vaccination still rages, with all the virulence of genuine variola. We shall give the conclusions, if they are ever reached.

Disinfectant for Purposes of Dissection.—All the bodies destined for dissection in the Ecole Pratique last winter were injected with a mixture of three litres of glycerine, and one quart of phenic acid; and the disinfection was as complete as could be desired.—*N. Y. Med. Record.*

A New Method of Preserving Pathological Specimens.—Dr. DeCamp, of Grand Rapids, Mich. (*Transactions of the Mich. State Med. Society*), gives us the following formula for preserving anatomical and pathological specimens:—

℞. Syrupus simp. (saturated strength); aqua, āā, oj.; alcohol, 95 per cent. f ℥iv.; acid, carbolic, ℥j. M.

The proportions of these have to be varied according to the transparency desired in the particular specimen being prepared. For most articles, the above formula is the nearest correct.

The specimen requires to have the blood removed by maceration (as it is soluble in this solution), or it will discolor the fluid.

Treatment of Rheumatic Fever.—Henry William Fuller, M.D., in a clinical lecture "On the Treatment of Rheumatic Fever" (*St. George's Hospital Reports*), gives us his treatment, and the subjoined statistics. From January 1st, 1845, to May 1st, 1848, 246 cases of acute rheumatism were admitted into St. George's Hospital, and they remained in the institution on the average 35 days; of these 246 patients, 119, or 1 in every 2.06, had some form of recent affection of the heart; and 1 in every 6.3 had pericarditis. During the six years ending December 31st, 1850, 17 cases, or about 1 out of every 27 cases of rheumatic fever admitted into the hospital terminated fatally. Since 1852, 417 cases of rheumatic fever have been treated by the alkaline treatment, and the disease did not prove fatal in a single instance. The alkalies should be given in such quantity that alkalinity of the urine will be induced within 24 to 36 hours. Dr. Fuller prefers the following prescription:—R. Potassæ acetatis, ℥ss; sodæ carbonatis, ℥iss; aquæ, f ℥iij.; rendered effervescent by the addition of succus limonis, f ℥j. This to be taken at a draught, and repeated every fourth hour.—*N. Y. Med. Record.*

Mortality for the Month of September, 1869:—

CAUSES OF DEATH.

Accident, drowned	5	Chorea	1	Kidneys, chronic inflammation of	1
" by fall	3	Convulsions	73	Laryngismus stridulus	1
" fracture of skull	1	" puerperal	2	Laryngitis	3
" run over by wagon	3	Consumption	30	Liver, cirrhosis of	1
" thrown from buggy	1	" and dysentery	2	" cancer of	1
" poisoning	1	Croup	8	" tubercular abscess of	1
" scalded	1	" diphtheretic	3	Lungs, congestion of	2
" railroad	6	" membranous	2	Manslaughter	3
" fall from window	1	Cyanch trachealis	1	Mouth, canker sore	2
" peritonitis, result of injury	1	Debility	2	Measles	2
Abscess, process, and dysentery	1	" general	3	" and cholera infantum	1
" lumbar	1	Delirium tremens	2	Meningitis	5
Anus, imperforate	1	Diabitis	1	" cerebro-spinal	1
Albuminuria and scarlet fever	1	Diarrhœa	47	" spinal	2
Apoplexy	1	" and convulsions	6	" tubercular	2
" and intemperance	1	" and teething	3	Old age	7
Aneurism of femoral artery	1	" chronic	19	" and diarrhœa	1
Births, premature	15	Diphtheria	24	Osophagus, stricture of	1
" tedious	1	Dropsy	9	Œdema pulmonum	2
" stillborn	37	Dysentery	38	Paralysis	2
Bladder, paralysis of, and debility	1	" chronic	4	" general	1
Bowels, inflammation,	12	" typhoid	4	Pericarditis	2
" obstruction,	2	Emphysema pulmonum	1	Peritonitis	3
Brain, congestion of	8	Encephalitis	2	Phrenitis	2
" compression of,	1	Entero-colitis	5	Pneumonia	10
" and mesenterica glands, disease of,	1	" chronic	2	" broncho	1
" inflammation	5	Epilepsy and intemperance	1	" typhoid	1
" softening of	5	Erysipelas	1	Purpuria hemorrhagia	1
Bronchitis	2	" and diarrhœa	1	Pyæmia	2
" and asthma	1	Fever, congestive	2	Rheumatism	1
" chronic	1	" puerperal	4	Scrofula	3
" capillary	2	" remittent	1	Small-pox	3
Cancer	1	" scarlet	28	Stomatitis, mercurial	1
" of liver and spleen	1	" malignant,	2	Suicide	4
" of thigh	1	" typhoid	22	Syphilis, congenital	1
Childbirth	1	" " neuralgia	1	Tabes mesenterica,	43
Cholera infantum	156	Hæmoptysis	1	Teething	30
" " and teething	2	Heart, disease of	3	" and convulsions,	2
" morbus	4	" hypertrophy of	1	Throat, ulcerated sore,	1
" " and gastritis	1	" organic disease of	1	Trismus narcentium	2
		" paralysis of	1	Uterus, cancer of	2
		" valvular disease	2	Uræmia poisoning following puerperal convulsions	1
		Hepatitis	1	Vitality, deficient	1
		Hydrothorax	1	Whooping-cough	6
		Hydrocephalus	17	" and cholera morbus	1
		" acute	5	Unknown	3
		" chronic	2		
		Inanition	13	Total	814
		Intussusception	1		
		Ileo colitis	1		
		Ileus and cancer of stomach	1		
		Jaundice	1		
		Kidneys, Bright's dis.	2		

COMPARISON.

Deaths in Sept., 1869,	814	Deaths in Sept., 1868,	741	Increase,	73
Deaths in Aug., 1869,	1071	Decrease,			257

AGES.

Under 1	320	20 to 30	36	70 to 80	11
1 to 3	231	30 to 40	36	80 to 90	6
3 to 5	48	40 to 50	27	90 to 100	2
5 to 10	36	50 to 60	30		
10 to 20	18	60 to 70	13	Total,	814

Males,	426	Females,	388	Total,	814
Single,	702	Married	112	Total,	814
White,	801	Colored,	13	Total,	814

NATIVITY.

Austria	1	England,	8	Newfoundland,	1
Atlantic Ocean	1	France,	1	Norway,	8
Bohemia,	6	Germany,	69	Sweden,	32
Canada,	5	Italy	1	Scotland,	2
Chicago, Native,	139	Holland	2	Switzerland	2
Chicago, Foreign,	387	Isle of Man,	1	Unknown,	7
U. S., other parts,	88	Ireland,	49		
Denmark,	2	New Brunswick,	2	Total,	814

MORTALITY BY WARDS FOR THE MONTH.

Wards.	Mortality.	Pop. in 1868.	One death in
1	3	9,094	3031⅓
2	20	13,074	653¾
3	29	15,076	520
4	35	17,796	508½
5	63	16,033	254½
6	57	13,083	229½
7	83	25,492	307⅛
8	58	15,813	272½
9	51	19,297	378⅕
10	12	12,925	1077
11	30	14,340	478
12	117	17,485	149½
13	35	11,164	319
14	58	14,839	255 5-6
15	57	21,078	369¾
16	18	15,465	859

Mortality.	
Accidents,	23
Bridewell	1
County Hospital,	24
Home for Friendless,	2
Hospital Alexian Brothers,	1
Immigrants,	23
Mercy Hospital,	3
Marine Hospital,	2
Manslaughter,	3
St. Joseph Orphan Asylum,	2
Suicide,	4
Total,	814

NEW TREATMENT FOR TAPEWORM.—Dr. Surtel (Gaz. Méd. de Paris) has tried the following method:—He gives in one dose two-thirds of an ounce of ether, followed by an ounce of castor oil two hours afterwards. The worm is thus discharged entire, and no pain is caused by the treatment.

THE SULPHITES AS ANTHELMINTICS.—Dr. Roe, of Dublin, has satisfied himself of the efficacy of the sulphites, especially of soda, in cases of tape-worm. He gives children ten grains of bisulphite of soda three times daily, preceding the treatment by an alkali, and following it by a purgative.

Hypodermic Injection of Caffeine in Poisoning by Morphia.—Dr. Senneker communicates to the *St. Louis Med. Journal* a case of this kink, where the patient was in a dangerous condition. He injected a grain of pure caffeine hypodermically; and after having injected three grains, in ten minutes the patient quickly recovered.—*N. Y. Med. Record.*

Male Fern in Tænia.—Prof. Christison (Boston *Medical & Surgical Journal*) declares the ethereal extract of male fern better than kousso or any other remedy for tænia. He has never failed with it. He gives it in doses of from 18 to 24 grains in syrup or emulsion; and repeats it at the end of a month or six weeks, by way of making sure of his work. The worm never comes away alive.—*N. Y. Med. Record.*

Dr. James McNaughton has been elected President, and Dr. James H. Armesby, Professor of Surgery, by the faculty of the Albany Medical College, in place of Dr. March, deceased. —*Ibid.*

Miami Medical College of Cincinnati.

TENTH ANNUAL ANNOUNCEMENT.

THE next Regular Course of Lectures in this Institution will commence on Tuesday, October 5th, 1869.

FACULTY:

GEORGE MENDENHALL, M.D.—Obstetrics.
B. F. RICHARDSON, M.D.—Diseases of Women and Children.
WM. CLENDENIN, M.D.—Descriptive and Surgical Anatomy.
JOHN A. MURPHY, M.D.—Principles and Practice of Medicine.
W. H. MUSSEY, M.D.—Descriptive and Operative Surgery.
H. E. FOOTE, M.D.—Principles of Surgery and Special Pathology.
E. WILLIAMS, M.D.—Ophthalmology and Aural Surgery.
E. B. STEVENS, M.D.—Materia Medica and Therapeutics.
W. H. TAYLOR, M.D.—Physiology, Pathology, and Morbid Anatomy.
S. A. NORTON, M.D.—Chemistry and Toxicology.
C. P. JUDKINS, M.D. and W. K. PERRINE, M.D.—Demonstrators of Anatomy.
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THE

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N. S. DAVIS, M.D., EDITOR.

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Original Contributions.

ARTICLE XLII.

THE FORCES OF ORGANIC LIFE — WITH SOME REMARKS ON DR. BREED'S CASE OF ILEITIS.*

BY Z. C. McELROY, M.D., President Muskingum County Medical Society, Zanesville, Ohio.

The case described by Dr. Breed is an extremely interesting one, as is also his manner of reporting it. In commenting on the facts, as he has presented them, it is not my purpose to censure him, but to present an analysis of its phenomena, from a different standpoint, and conclusions somewhat different from those at which he arrived; for, it seems to me, he failed to comprehend it, either before or after death, though he scrutinized it so closely. Working in the accredited methods of investigation, his conclusions are fully warranted by the philosophy by which he was guided. The purpose of this paper is to review it from a physical basis of life, in the same way as any other problem in physical science would be studied, on its facts alone.

For my purposes, he does not report what to me would be the most important single item in the daily record of his patient's condition—his temperature, ascertained by a correct thermometer in the axilla. The fact of his patient being a "compositor,"

*CHICAGO MEDICAL EXAMINER, for October, 1869.

seems not to have directed his attention to the possibility of lead having something to do with his patient's condition and death. His *post mortem* would have been more complete had he extended his examination to the gray matter of the nerve plexuses, and lower portion of the spinal chord.

The following are, briefly, the principles of organic life, on a physical basis, which will guide me in the study of Dr. B.'s case:—

1st. The reign of law, in organic and inorganic nature, is supreme and invariable. The order, harmony, and perpetuity of the universe depend upon the absolute inflexibility of natural law. None flinched or failed in Dr. B.'s case.

2d. The total quantity of matter and force in the world is fixed and unchangeable. Nothing can be added and nothing destroyed. The forces of the inorganic world are mutually convertible into each other, and each into all; and the forces of organic life are correlated with the physical forces. There is, in fact, an absolute unity of force, in organic and inorganic nature.

3d. Excluding from the human body known inorganic elements and the operation of the known physical forces of light, heat, electricity, magnetism, etc., and there is left nothing but its *forms*, *i.e.*, the types or shapes of the tissues, textures, and organs—and that is all there is of the hitherto mysterious and incomprehensible vital force, about or in it. Vitality, therefore, is the preserver of form, with the momentarily changing material of its tissues and textures. Over forms, normal or abnormal, therapeutic agents have no control or influence whatever, except to destroy; therefore, as physicians, we need not trouble ourselves about vitality, in our ministrations to the sick. All that we can influence by therapeutic, remedial, or hygienic agencies is, the matter and force of the inorganic world, organized as food by the vegetable kingdom; or the vegetable matter in organized tissues of other animals, in its ascent, through the processes of digestion and assimilation, to the normal types and forms of organic life, with normal dynamic capabilities; and the decay, oxidation, or waste of the tissues in the evolution of

normal organic dynamics, as heat, mechanical motion, sensation, emotion, chemical affinity, and intellection.

4th. A conception of the human body, embracing most of its prominent facts, in the evolution of force, is obtained in the study of a burning candle, which gives light and heat, because it, the candle, is being consumed. So, of organic dynamics, each result, be it thermal, mechanical, chemical, sensory, emotional, or intellectual, is at the expense of the tissues; thus, so much heat, so much tissue resolved into carbonic acid, water, and urea, or other products evolved in the decay of organic tissues; so of mechanical, chemical, sensory, emotional, and intellectual results, so much tissue resolved into carbonic acid, water, and urea. Thus, this very identical memoir, whatever it may be worth to those who may choose to read it, has been composed at the expense of the gray, brain matter and muscles, and other tissues of the author; and so of the reader, for every impression received by his mind, so much brain and other tissue reduced in organization, and started on its way back to the positions of its elements in inorganic nature.

The thermometer measures the rate of tissue waste—nothing more, nothing less—in accordance with the law, "for every dynamic result there must be change of matter," whether in organic or inorganic natures; and that is the impassable gulf in the way of a "perpetual motion" machine; and hence the importance of the thermometer, clinically, for a single degree of variation from the normal temperature of the body marks too much or too little waste. To maintain organic life in its highest perfection, each day's waste must be repaired, and each day's repair wasted.

5th. The human body is a unity, an integer, composed of many fractions, in arranged and disarranged conditions, *i.e.*, in health and disease. Whatever impressions are made or received on one part are instantly communicated, through the white matter of the nervous chords, to the whole organism. There is, therefore, no such a thing as a local disease—all the nosology of the past and present to the contrary notwithstanding.

6th. The influence, or action, or effects of all therapeutic,

remedial, and hygienic agents, or measures, are general, *i.e.*, influence the whole body, and not a part of it, as the nomenclature of the *materia medica* and nosological classifications of diseases teach and imply.

7th. The disease is always something less, not something added, to normal life. The human tissues in health are examples of the highest organization in the universe, are the very perfection of organic life, and all changes are to lower states of organization, and to death.

8th. That the patient is, under all circumstances whatever, superior to his or her maladies, and should be the main object of care on the part of the physician. Disease, or a disarrangement of the body, is always of secondary importance to the patient. Homeopathy, hydropathy, eclecticism, and other empirical systems of practical medicine are gigantic protests against, as well as grotesque caricatures of, the philosophy and practice of regular medicine. What regular medicine needs is a central idea or theory of life, embodying its empirical facts and experiences, in health and disease. Practitioners of medicine rarely rise above their philosophy. Physical science can supply this need.

9th. The nerve masses, containing gray and white matter, are the organic electro-magnetic batteries, evolving organic force. The nerve chords, containing only white matter, are, like the telegraph wires, which now so nearly girdle the earth, conductors of force only, or, perhaps, more properly, force and impressions. The larger and smaller brain, medulla oblongata, and spinal chord are the main force evolving masses. The ganglions and plexuses, containing gray matter—the so-called sympathetic system—one supplemental to the main masses, and are found only where important organs are to be presided over, so as to render the performance of their allotted functions, or offices, to some extent, independent of the main masses. The necessity for this anatomical arrangement is obvious enough; for, were it otherwise, concussions or shocks from falls, accidents, and moral impressions would more uniformly prove fatal to life; for these act by suspending destructive metamorphosis, or the changes of

matter evolving force; and as life, or organic dynamics, depend absolutely on changes of matter, the result, very frequently, would be a true enthanasia.

The facts stated by Dr. Breed, in relation to his case of ileitis, are as follows:—

1st day. The patient, a lad, 16 years of age, a compositor, after a chill, had some fever; pulse 80, moderately full and strong; pain in the bowels, somewhat paroxysmal, though never quite easy. The bowels were a little distended, elastic, and a little harder to the feel than natural, with tenderness on pressure. Tongue moist and covered with a dark, slimy coating. Had had no motion in bowels for 24 hours. Had vomited freely. The treatment instituted by Dr. B. is not noticed, as it falls outside of the purposes of this memoir.

2d day. No motion from bowels; urine free, but not remarkably high-colored. Vomiting persistent, decidedly bilious, and very dark; pulse 98, soft, rapid, and undulating; artery large; circulation languid; copious perspiration during sleep; tenderness of abdomen much the same; not much distension, though uniform; no flatus, or meteorismus; on applying ear to the abdomen no sound was heard, no gurgling—a dead silence prevailed throughout the abdominal region; during vomiting, muscles of abdomen did not coöperate with those of thorax; matter vomited, grass green, and acid.

3d day. Bowels not moved; vomiting continues; countenance haggard; takes no nourishment, except beef-tea, in enemata.

4th day. Less sweating than third day; vomited occasionally; countenance anxious; very restless; passed urine several times; pulse 100; artery large, felt soft and undulating under the finger, against which the pulse dashed with wave-like impression, and was gone; prostration evidently increasing. In the afternoon, pulse 100; passed some fecal matter; vomiting very distressing; hiccough.

5th day. Vomiting continues; small fecal discharges.

6th day. Vomiting; has become stercoraceous; passed urine several times; pulse 120, soft and undulating; countenance

hippocratic; restless; somewhat delirious; no meteorism; bowels slightly tympanitic; death, soon after midnight.

It is further remarked (p. 584), there was no disposition to flex the legs on the abdomen; could lie on either side.

Post Mortem.—Abdomen moderately distended; peritoneum thickened, softened, its bloodvessels enlarged, very dark color, but no effusion; small intestines nearly empty, not collapsed, but generally discolored, with extensive adhesions in various places; muscular and mucous coats of intestines dark, thickened, nearly in a state of sphacelus; stomach not opened, but its external appearance seemed healthy; gall-bladder moderately distended with healthy bile; other organs examined were healthy; no mechanical obstruction; no impacted feces, or undigested matter found in bowels.

The facts of symptomology are only reproduced, and mainly in the very words of Dr. B.; though, for brevity, some sentences have been slightly abridged, but not so as to impair or alter the sense in which he used them.

A study of this young man's case, in the light of the general principles laid down, the phenomena which so sorely puzzled Dr. B. become less opaque and more understandable.

The patient was a compositor, handling leaden types during working hours; perhaps, like other compositors, holding type in his mouth very often, which is, probably, the clue to unravel the whole case. On the first day, symptoms, a negation; was probably confined to the house, possibly to bed. No mention is made of the duration of the prodromic symptoms beyond a few hours. He is weak, has some pain in the bowels, and has vomited. The absence of the temperature of his body is a very serious gap in the detail of the symptoms. It may have been above or below the normal standard; but, most likely, would have shown a range of two or more degrees above, exactly corresponding with the chemical changes taking place in the abdomen; for these chemical changes would, most probably, be correlated in heat. The state of the temperature would have given the key to the proper treatment. Here, the question as to whether it was the patient himself, or only his bowels that were sick, would,

with me, have naturally come up for settlement and decision. The thermometer would have greatly aided me, for if the temperature was much above natural, then it would have been clear to me that it was the patient himself that was sick; and as all patients are superior to their maladies, the patient would have been the principal object of professional care. And by this is meant, that no *coup de etats* would have been undertaken to catch the disease off its guard, and thus kill or expel it, and so cure the patient at once. But supposing that it was the dreaded *inflammation* that was in progress in the patient's abdomen, as shown by the increase of temperature, the question, what is inflammation? might be appropriately discussed in the mind. Is it a higher or lower grade of organic life than health? Is it something added to or substracted from the normal condition of the tissues in which it may be located? Does it tend to a condition higher than life, and, therefore, desirable? or does it tend to death? If it tends to death, what is it? Is it like a viper, a something foreign to the body, which has gained access to its interior? Or, is it a super-oxidation of tissue, not yielding normal organic force? Is the tissue thus wasted being replaced? Are the processes of repair and waste normal? These may be easily answered. Inflammation is a super-oxidation of tissue, with a suspension of repair in normal type, the chemical changes being correlated as heat, and not normal organic force. It is nothing more, nothing less, than a natural process taking place too rapidly, with repair arrested; the blood plasma, failing to reach the normal type of tissue, is poured out into the meshes of the wasting tissue, or on its surfaces, constituting the thickening spoken of by Dr. B. The decay of this exudation constitutes pus.

But the case was a negation, the first day. Second day, the ear detects no sounds in the abdomen; the legs are not drawn up; the pulse is feeble; there is vomiting. What is the significance of these facts? Failing power is their lesson. Where? The sources of power are the nerve masses, containing gray matter, and it is to them attention must be turned for an explanation. Nothing is said of the state of the pupil by Dr.

Breed, at any time. I do not know why this circular muscle of the eye should be so called. While its main purpose is, undoubtedly, to regulate the admission of light into the posterior chambers of the eye—expanding, as it does, in dim, and contracting in strong or bright, light—it incidentally serves another and still more important purpose, to those who will observe it, in revealing the condition of the forces of organic life. It is, so to speak, the dial on which is momentarily recorded the condition of the forces of life. In Dr. Breed's case, it was probably widely expanded and sluggish, and, if so, it was additional evidence that the phenomena detailed by Dr. Breed indicated failing organic power.

How and why did this young man's dynamics fail? He was a "compositor," handling type, mainly composed of lead, during all his working hours; and the probabilities are that the failure of the dynamics was due to lead poisoning, or lead paralysis.

What is lead poisoning? What is its *modus operandi* in producing colic and paralysis?

Referring again to the burning candle, as affording the best conception of human organic dynamics—though equally applicable to all animal organic dynamics—how would incombustible matter, as lead, combined with its tallow, be likely to influence its combustion? A candle requires a soft, spongy wick. When flame is first applied to the wick, in a new candle, it burns very feebly for a time. After a while, a portion of the end of the wick becomes charred, but still very porous, and around it, at a certain distance below the flame, a little cup is formed, filled with tallow, rendered fluid by the heat from the combustion going on above it. This fluid tallow is drawn up through the soft, spongy wick to the junction of the charred and uncharred wick, where it is decomposed or consumed; the tallow resolved into light, heat, aqueous vapor, and carbonic acid. The charred portion of the wick, in the heat of the flame, soon solidifies, so that fluid tallow cannot pass through it, and be divided, so that combustion can take place. This it is requisite to remove, to obtain the maximum of light. Now, suppose minute portions of oxide of lead were diffused through the tallow, it would fill

up the spongy portion of the wick much more rapi lly; and if it were snuffed all the time, it would still give much less light than it would if the tallow contained no incombustible matter, or matter incapable of assuming the gaseous or liquid forms. This gives me a clear mental conception of lead poisoning and lead paralysis. The lead may be interslitially deposited in the constructing tissues, or it may otherwise act by preventing the construction of tissue in normal type, with normal dynamic capabilities. Perhaps it may act in both ways. But it must act in one or the other, and it detracts nothing from the value of the conception which, or in both. As it cannot be made to assume either the fluid or gaseous form, by the chemistry of organic life, it accumulates in the tissues, and interferes with their proper oxidation, and the evolution of normal organic force; for only normal tissue can evolve normal force by its decay. And that, it seems probable, is all there is, or can be, of lead poisoning, or lead paralysis.

It may have been so in the lad treated by Dr. Breed, or it may not. But there certainly was a defective evolution of force, and that defect extended to the nerve masses containing gray matter; for, if they had been in a state of integrity, there would have been more pain, probably amounting to spasm. The problem of organic life for our study in the human body is, the conversion of food into tissue, and its oxidation, so as to produce normal dynamic force. In the young lad's case, tissue-making was certainly suspended, probably on the first day he was seen by Dr. B., but certainly on the second, and forever after. Oxidation, in the production of normal force, was as certainly suspended from, and, probably, prior to, the first day's treatment, though his candle did not cease to burn till the close of the sixth day. The *post mortem* revealed that the contents of the abdominal cavity had been partially surrendered to the process of ordinary putrefactive decomposition, some days before his dissolution. The nerve masses would, probably, have shown equally, or, perhaps, more striking changes, to the microscopically aided eye, and, very likely, to the unass sted vision.

In studying the case, the leading fact to be borne in mind is,

that all the phenomena occurred in obedience to natural law. No natural law was specially put in force for his destruction, and none suspended for his protection. All the chemistry and physics, in his case, were complete. Dr. Breed, according to his own showing, failed to interpret the phenomena rightly. From his published statement of the case, and in no unfriendly spirit, the results of my study of his case are presented in this memoir. As we differ so widely, it is not probable both are right, though, it is possible, both of us may be wrong. Through two decades of practice, I looked upon life and disease precisely as he did in this case, with the result of my being in a perpetual fog—no clear light in any direction. My philosophy was founded on conjecture, and my therapeutics on hope. But it is somewhat different now. Regarding the body as a unity, and disease, *per se*, a myth, the so-called diseases to which it is subject being regarded merely as *disarrangements*, and not as separate and special entities; and limiting my conceptions of the *modus operandi* of therapeutic, remedial, and hygienic agencies to their influence on the transformation of food into tissue, or constructive metamorphosis, and the oxidation or decay of tissues, so as to preserve its arrangements in the evolution of the forces of organic life; I certainly prescribe, as I believe, more intelligently, and it may be added, I think, more certainly and successfully than before. For myself, I have, in fact, as I fancy, in a great measure, transferred practical medicine into the domain of exact science. It was not done, however, without effort, and not accomplished at a single bound; for my progress was slow, labored, and gradual. I studied the steam engine, the magnetic telegraph, watches, the operations of the forces of inorganic nature around me, in all kinds of machinery, the correlation of the physical forces, and applied the methods of investigation in physical science to the elucidation of the phenomena of organic life, with the results stated. I am conscious that I am far from being perfect, have, indeed, a great deal to do, and but a fragment of life to do it in; but I have learned to observe and think on my legs, and in my carriage, as well as in my study; and so, when awake, am never altogether idle. The dif-

ficulties in the way of getting out of the established and well-worn "ruts" of thought and philosophy, great as they have been found, have all been surmounted. I do not any more think in the old channels. I ask this of all medicines, can you, or do you, aid in the transformation of food into flesh, or its waste or decay, by oxidation, so as to evolve normal, organic force, and the exit of the results of tissue decay properly from the body? If the empirical facts of therapeutics gives *no* for answer, then, I leave it with the apothecary, as of being no use to any of those who consult me for disarrangements of their bodies. The empirical facts of the *materia medica* suffice to obtain a tolerably clear conception of the actual or probable influence of any drug on constructive or destructive metamorphosis of the tissues. Nor is any serious difficulty encountered in reconciling the apparently contradictory facts of published therapeutics. For instance, the fixed alkalies, and most, if not all their combinations with acids, are agents to promote waste of tissue, and the elimination of the products of tissue metamorphosis out of the body. A memoir recently appeared in an Eastern journal, extolling the "bromide of potassium," in cholera infantum—a wasting disease (speaking in past ideas to me) of children, during the hot months of summer. Here is an apparent dilemma. "How can you reconcile that with your theory of the action of medicines?" asked a medical friend, who thinks my theory of life all stuff. In reply, I remarked to him, "why do children have the summer complaint?" "Why do they have frequent discharges from the bowels?" "and do those who perish generally wind up their lives in convulsions?" He replied to all the questions, "because they were exhausted by the hot weather." "Please to tell me what is exhaustion?" I asked, "why is it weakness?" he replied, "the warm weather exhausts them, and hence the bowel complaint." That is a fair sample of the muddle of life and therapeutics in which I was myself involved so many years. Now, my conception of the condition of things described as cholera infantum is, that, little by little, the tissues of children are constructed out of normal, molecular type, and, therefore, incapable of evolving normal

organic dynamic force in their decay. To save the child, the "*vis meducatrix natura*," the shadow of the laws of organic life, endeavors to remove this defective tissue by a peroxidation; the force evolved being, for the most part, correlated in heat. The debris of tissue metamorphosis, if retained in the body, wholly arrests the process of tissue repair. The bowel complaint is set up for the escape of these products from the body. If it is arrested by therapeutics, or otherwise; coma and convulsions speedily end the life of the patient. The bromide of potassium, by facilitating the oxidation of the defective tissues, acted in harmony with the laws of organic life, and was, therefore, eminently successful. But it is by no means the only agent or measure by which the same ends are accomplished. Chalk, mercury, blue pill, Rochelle salts, bitart potassa, castor oil, etc., all act in much the same way, *viz.*, by eliminating the debris of tissue metamorphosis, and promoting oxidation.

In conclusion, permit me to thank Dr. Breed, first, for reporting the case; and, secondly, for exposing the inner working of his mind in the study of it. It has afforded me a good apology for writing this memoir, for the sole purpose of aiding others in getting out of the muddle of phyisology, pathology, and therapeutics, in which I was so long enveloped myself, if there are any such—a very likely result, as, I think, in my own case, of the existing conceptions and philosophy of organic life.

ARTICLE XLIII.

DR. BREED'S REPLY TO DR. McELROY.

Since my report on Ileitis, in the October number of the *Chicago Medical Examiner*, I have received several letters from medical men living in different parts of the country, in regard to the case.

While all seem to agree in commending the report in a general way, each has some suggestion to make in reference to some minor point, where he thinks the paper might have been improved. In comparing these letters I find that what one

criticises, another praises, and *vice versa*—no two agreeing in condemning the same thing; so that I find it impossible to please all, and, indeed, have not quite satisfied myself. Dr. Holton, an intelligent physician, of Buda, Ill., thinks I should have given more prominence to the peritoneal inflammation, evidenced by the extensive adhesions, as, to his mind, that was the principal lesion to be considered.

Dr. W. H. Nance, a successful and experienced physician of Vermont, Fulton County, Ill., writes me as follows:

"I will say, Doctor, that I am much pleased with the "*report*," and the conclusions drawn from it, and presume that they are correct, in the main, and that you are right in your conclusions respecting the results emanating from inflammation of the muscular coat of the small intestines. I am not sure, however, that in your concluding paragraphs, where you are summing up the fatal results of such a condition, that you have made the happiest selection of a word to represent that condition, where you speak of a portion of the alimentary canal being *paralyzed.*

"That all normal function is suspended, is admitted; but is not that suspension the result of a condition the very reverse of paralysis? Paralysis is a loosening, relaxing, or letting go, from want of nervous force, or energy. But this intestinal condition is the result of a hyper exaltation of the nervous and muscular powers, of the part, blown into the intense heat of inflammation, represented as being *seized* and held as with the hand of some etherial Titan."

Dr. Z. C. McElroy, a medical philosopher of Zanesville, O., in a carefully written "Memoir," on "The forces of organic life," reviews this report from a different stand-point, and, in the light of certain philosophical, physiological, and hypothetical principles laid down by him, reaches a conclusion that it was *simply* a case of lead-poisoning.

Now, as all these suggestions are made in a courteous and friendly way, and intended to enure to my benefit, and promote the science of medicine, I am exceedingly thankful for them, and will try to profit by them. That this report should have

thus called out this discussion, upon the interesting questions involved, is neither surprising nor displeasing to me. Indeed, I have no doubt that, in the end, I shall not receive the *least* of the *benefits* from it.

In offering a few additional remarks upon the same subject, it may as well be admitted, that, while working up the report from the symptoms, history, and autopsy, my mind was, for a time, undecided as to how best to interpret the phenomena. The leading symptoms, during the illness, were those of obstruction. The autopsy, however, revealed the effects of extensive and severe inflammation, involving all the coats of the small intestines, together with such signs as led to the belief that the cerebro-spinal and ganglionic masses were seriously implicated in the disease. While my mind was thus undecided, halting, as it were, between two opinions, *viz.:* Whether I should go back of the inflammation, which was an undoubted element in the disease, and interrogate the nerve centres for the prime cause of the difficulty, or, on the contrary, confine my speculations to the former, and hold inflammation responsible for the trouble; the question of *lead-poisoning* came up for consideration.

The occupation, habits, and several striking peculiarities of the case, conspired to direct my attention to this particular *point.* I was told that the patient was much in the habit of holding *type in his mouth* while at work. This was a leader. The symptoms that led me to suspect the integrity of the nerve centres were, a *decided* and *unmistakable* absence of arterial tensions, and the partial paralysis of the abdominal muscles, so as not to exhibit the usual reflex movements in emesis and defecation; and the *post mortem* displayed, an *atonic* condition of the muscular fiber of the intestinal walls, indicated by a distended condition of the empty intestines, where we usually find them collapsed.

I first directed my attention to this question. In lead-poisoning, are the intestines, at the seat of the disease, distended, dilated, or are they, on the contrary, collapsed, or contracted? After a careful investigation of this subject, I came to the con-

clusion that there was a vast preponderance of testimony in favor of the opinion that, where there was any pathological appearance at all, a *contracted* and *collapsed* condition were those *generally found* at the seat of the disease. The arteries were also, in lead disease, smaller than natural, from the same general contractile condition, affecting the arterial coats, and, moreover, the tissues affected were found generally *pale*, *exsanguined*, and more or less *wasted*. The disease, "tabes saturnina," is supposed to be due to this constringing influence of the bloodvessels.

While DeHaen, Merat, Eberly, Wood, and Letherby, concur in the belief that the *contracted* or *collapsed* state of the empty bowel, at the seat of the disease, is the pathological condition to be looked for, Sir G. Baker, Andral, Townsen, West, and Louis have *often* found *no alterations whatever* in the *intestines*. In a case which terminated with the symptoms of saturnine encephalopathia, *viz.:* delirium insensibility, and tetanic convulsions, Empis and Robinet found no anatomical alterations of any importance. Lead was discovered by incineration in the brain and liver.

In Letherby's case, lead was freely discovered in the stomach, in the brain, muscles, liver, intestines, blood, and in the serum of the cerebral ventricles. The stomach and intestines were *pale*, and the latter were contracted, and in some places invaginated. Pereira says, in regard to the constitutional effects of small doses of lead, that the arteries become reduced in size and activity, and that the *pulse becomes* slower and *smaller*, from which I infer that the preparations of lead give rise to a contracted state of the bloodvessels. How did these symptoms correspond with my case? Why, the muscular coat of the small intestines, besides showing such signs of inflammation as thickening, a deep red, or purple color, the muscular fibers were evidently in an atonic, inactive, or paralyzed condition, so that they were quite unable to propel the contents of the tube onward. They had lost their contractile power. This was a prominent feature in the case, and one that I believed was the key to the explanation of the unusual phenomena in

the symptoms, and I desired, therefore, particularly to emphasize it. This want of contractile power in these mucular fibers was the cause of the symptoms of obstruction. There was no other apparent cause to be found. Was this suspended function due to some lesion in the nerve centres, or was it a result of the inflammation of the muscular coat itself? This was the question. I acknowledged that I was not quite satisfied on this point; but, in either case, the symptoms of obstruction would be the same, and, as the former hypothesis involved a somewhat speculative question, and the latter would fully account for all the symptoms, and, moreover, not finding the symptoms to correspond with those of lead-poisoning, I concluded to adopt the simpler explanation, and not go behind the inflammation in the structures for the proximate cause.

While my mind was perplexed on this subject, I was assisted, perhaps, by Prof. Gross' definition of disease, quoted by Dr. McElroy, in reply to Dr. Hendrick, in the July number of the *Chicago Medical Examiner*, for 1868. Dr. McElroy says:—

"First. What is disease? Disease is not, as it was formerly supposed to be, a special entity, a particular essence, a some thing vague, intangible, mysterious, but simply *a departure* from the normal standard, a change in, or of a part, brought about by the *perverted* action of its *circulation*, *innervation*, and nutrition; and modified by function and structure. Nearly every disease, whatever its nature or site, is *essentially* an *inflammation*. Even in what are called the *neuroses*, or nervous affections, *inflammation* generally plays a conspicuous part."* By carefully scanning this definition, it will be seen that disease is simply an *abnormal condition*, an obvious change, in a part, brought about by a *perverted* action of the *circulation*, *innervation*, or *nutrition*. Dr. McElroy seems to endorse this definition, and hence, he will be likely to excuse me for not being ready to call the disease by some name that would aim to ignore the *inflammation*, and fix the trouble upon the lesion of *innervation*. Let it be remarked that the *perverted* action *here* is not the disease, but the proximate *cause* of the *disease*. Now,

* Prof. Gross, "Now and Then," published address. 1867.

suppose Dr. McElroy does succeed in establishing a fact in this case that the trouble could be traced remotely to the gray matter of the "nervous masses," it can only be called a *perverted action* (the cause), resulting in *inflammation* (the result, or disease,) according to his own definition. If all diseases are, moreover, essentially an *inflammation*, I could not have been very far wrong when I denominated the disease an inflammation of a particular structure. But I do not desire to split hairs with the Doctor, for I am too well pleased with his paper for that.

That the reader may have a fuller view of the matter, and enable him the better to understand my reasons for not ascribing the disease to lead, I here submit the principal symptoms of the two diseases, in parallel columns. The symptoms of lead-poisoning in the first, and those reported in my case of ileitis, in the second:—

POST MORTEM APPEARANCES IN BOTH.

Symptoms of Lead-Poisoning.	*Symptoms of Ileitis.*
Intestines generally contracted.	Intestines dilated.
Inflammation not characteristic.	Inflammation severe.
Muscular fiber *pale*, exsanguined, and wasted.	Muscular fiber red, purple, atonic, and thickened.
Skin *generally* hot and dry.	Skin *cool* and *moist.*
Much *pain* and colic.	Very little pain.
Signs of spasms.	No spasms.
Convulsions.	No convulsions.
Gums, pale bluish line.	
Tongue flabby, and tremulous.	Tongue covered with dark, slimy coating.
Mouth dry.	Mouth moist.
Urine scanty, and high colored.	Urine free, not particularly high colored.
Face pale, dingy, and sallow.	Face flushed and livid.
Motor power impaired.	Sensory power more injured.
Weakness of wrists and joints.	Normal.
Extremities cramped.	Normal.
Pressure gives relief to pain.	Pressure not well borne.
Muscles of chest spasmodically contracted.	Muscles of abdomen *paralyzed.*
Pulse slow, and artery small.	Pulse slow, and soft, undulating, and artery large.

Loss of sensorial function.	Normal.
Palsy of extremities.	Normal.
Vomiting bilious matters.	Vomiting bilious and stercoraceous matters.
Hardened feces in passages.	Feces thin and aqueous.

Such are the most prominent symptoms, and anatomical changes found in lead disease, as contrasted with those reported in the case denominated ileitis.

After as full and careful an examination of the symptoms, morbid anatomy, and general history of lead-poisoning, as I was able to make, and comparing them with the case in hand, *pro* and *con*, I determined on the name "Ileitis," as the best term I could think of, to indicate the nature and pathology of the affection, I concluded, therefore, to make no mention of lead, as cutting any figure in the disease; but I aimed, nevertheless, to employ such phraseology as would convey to the mind all the important features of the case. I expected every physician who read the report *carefully* would form his own opinion of the diagnosis, and, therefore, I concluded to send it forth to meet its fate, while I anxiously waited the *denouement*, whatever it might be.

Whether I was right or not, I do not *now* know. Those who, with myself, looked upon inflammation of the coats of the bowels as the *essential* and most *important element* in the *disease*, will now see, and understand why I used the term "*paralysis*," as I did; while those who, from the symptoms and autopsy, were led to infer some serious lesion of the nerve centres, will, at least, allow the fidelity of the description. It may be remarked in this connection, however, that while studying Dr. Abercrombie's observations on ileus—(see diseases of the abdominal viscera)—I found that he declared, in opposition to all the above authors, that the *collapsed portion* of the *empty intestine*, is the *natural condition*, while the distended portion is the primary seat of the disease; the distention arising from a paralytic condition of the muscular fiber, whereby it is unable to contract and propel the contents of the tube onwards through it. Now this view seems very probably the correct one, if we apply the same hypothesis to lead colic, since the action of lead

upon the muscular fibers of the intestines is doubtless of the same kind as that exerted upon the fibers of the voluntary muscles. This hypothesis, moreover, is greatly strengthened when we consider the therapeutic action of *alum* in *curing lead colic.*

In most, if not all, of our works on therapeutics, there is a striking analogy between the recorded symptoms of lead, and alum, when administered internally in small doses. Nevertheless, alum is represented as the best remedy in lead colic. This looks unphilosophical, and should be looked into. We do not cure diseases on the Homœopathic theory of "*similia similibus curantur*," but on that of "*contraria contrariis curanter*," instead. Now, Dr. Copeland has actually ascribed the curative effect of alum in lead colic, to its power of exciting the contraction of the partially paralyzed muscular coat of the small intestines in this disease. If he is correct in thus regarding these two remedies as antagonistic, and antidotal, in their effects on the system—that, while one has a tendency to relax, and paralyze the intestinal, arterial, and voluntary muscular fiber, the other has a directly opposite tendency; then will the paradox be explained, and the philosophy of our medication be vindicated. I feel under deep obligation to Dr. McElroy, and the other medical gentlemen, for raising these questions in the manner they have, and thus stimulating inquiry on this subject. With my eyes half open to these facts, I felt sure that there was a condition in the case justifying the term paralysis, yet I felt unwilling to launch out into unknown seas, and indulge in fruitless speculations upon the mysteries of innervation. That there was some fault, some abnormal condition in these nerve centres, interfering with their acknowledged function in keeping up that tireless state of muscular tension throughout the body, I felt quite confident. The atonic condition of the muscular fiber in the alimentary canal, in the coats of the arteries—in the abdominal and respiratory muscles, all clearly indicated this want of nervous power. This striking peculiarity first awakened my suspicion that there was some toxic agent circulating in the blood, and thus weakening the secret springs of life. Had the symptoms of lead-poisoning corresponded with

these notable facts, I should have attributed the difficulty to that cause.*

I am, by no means, unobservant of the fact that these nerve centres are, especially in this climate, frequently at fault, and seem to constitute one of the first, and most important links in the chain of morbid actions in very many diseases. In a report, as Chairman of the Committee on Practical Medicine, read before the "Military Tract Medical Association," and published in the April number of the *Chicago Medical Examiner*, for 1868, I devoted considerable attention to the importance of the cerebro-spinal and ganglionic systems of nerves in the diseases of Northern Illinois.

In this report will be found enunciated views, which seem peculiarly applicable in this connection. The importance of the subject must be my excuse for repeating them here.

When the nerve centres presiding over nutrition, digestion, and the intestinal secretions generally, from *any cause* (and they are subject to be sympathetically modified in their molecular actions by the slightest and most varied impressions upon any portion of the body) become too much depressed, irritated, or *in any way* so modified in the delicacy of their normal structures as to unfit them for furnishing the stated necessary nervous supply, *disordered digestion is the result*, either diarrhœa or *constipation.*" Again, I quote from the same report: "When the nature and *modus operandi* of these delicate structures are better understood in maintaining the *solidarity* of the whole human economy, the part they play in the delicate processes of innervation, sensation, digestion, secretion, elaboration, nutrition, calorification, growth, extension, and repair, respiration, disintegration, excretion, locomotion, and ratiocination, we may begin to conceive something of the importance and magnitude of this intricate subject."

Again: "When it is borne in mind that, in this climate, especially, the *onus* of disease is often thrown upon these struc-

* That inflammation in a muscle is quite competent to arrest its power of contraction, many familiar examples might be given, aphonia in laryngitis is one good illustration.

tures, and that it is in these nerve centres that the *nerve force* is correlated into *cell* action—*cellulation:* (the primal and fundamental process of all organized structures,) secretion, etc., that it is here, indeed, that the nerve force *seems* to be generated, and that the nerve centres *altogether* preside over every physical phenomena in the body, it will not seem so strange that even *slight molecular changes* in these delicate tissues should crop out in grave and formidable symptoms of disease; and, more especially still, when it is remembered that these nerve centres *first* feel the noxious or depressing effects of any toxic agent in the circulation, that they, more than any other organ of the body, therefore demand for their normal action pure, oxygenated blood, and healthy food, free from any deleterious agents, we shall be able to understand why they are so frequently at fault." Hence it will be seen, I hope, that there is no inconsistency in the hypothesis of *a perverted* action of these nerve centres, even though we may not be able always to designate the precise cause of the perversion.

Should it be decided, however, after all, that Dr. McElroy is correct in his opinion of the principal agency of lead in the case reported, then will it appear still more probable, in the light of all the phenomena in this case, that Dr. Abercrombie is right in his view of the pathology, and Dr. Copeland, in the *modus medendi* of alum in the cure of lead colic; and that all the other eminent pathologists cited are mistaken.

However this question may be viewed, it is an interesting subject of inquiry; and with the ultimate decision I shall be content.

ARTICLE XLIV.

KERATITIS.

BY F. K. BAILEY, M.D., Knoxville, Tenn.

I was called, March 31st, 1869, to go into the country two miles, to visit a woman who had been suffering from diseased eyes for some time, and had been treated by a quack pretender.

In the morning, she had taken some medicine, the effects of which alarmed the family. Found the patient a young married woman, about 22 years of age, a native of E. Tenn., and the mother of one child, about 18 months old. Temperament nervous, lymphatic, light hair and complexion. Just arousing, so as to speak, I entered the room. Found that she had taken opium. Made no further examination than to be satisfied that she would recover from the overdose, and merely learned that she had suffered from an affection of the eyes for some months.

April 8th. Mrs. H., above mentioned, called upon me, at my office, requesting that I should treat her case. Found her pulse feeble, and the extremities cool. Face pale; tongue clean, but flabby. Bowels not constipated, for the reason that she had taken calomel and other cathartics, with a view "to regulate the system." She had not been allowed to eat hearty food, and having no desire for any other, she had been poorly nourished, with a free secretion of milk added as a drain upon the strength. Suspected a strumous diathesis. Besides, I was informed that an older brother was nearly blind from disease of the eyes, contracted while a soldier in the late war. On examination, I found considerable thickening of the cornea, at its upper portion, in the left eye, with a general cloudy appearance, approaching opacity. The sclerotic coat slightly congested. Photophobia severe.

The right eye presented a similar appearance, but to a less degree painful, with no infiltration in the cornea. The same cloudy appearance was seen, however, as though this was only a little late in taking on a condition like the other. There was indistinctness of vision, and in cloudy weather she found it difficult to read.

Considering it a case of debility, I advised the use of the following mixture:—

℞. Syr. Sarsa. Comp., ---------- ℥ij.
Liquor Iodidi Ferri, ---------- ℥ss.
Potassii Iodidi,---------- ℥ij.
Sulphatis Cinchoniæ,---------- ℈j.
Syr. Zinziber,---------- ------ ℥j.

M. Sig. Teaspoonful at each meal. No local applications, but pure water. To wean the child.

15th. Patient called. Found the appearance of the eyes unchanged, but the general health improved. To continue the mixture.

28th. Patient called, when I found her much improved. The opacity disappearing. Less congested appearance of the eyes. No pain, but still complains of weakness of vision and some intolerance of light. There is an inability to raise the upper lids, giving a drooping appearance to the eyes. Suspended the mixture, and prescribed as follows:—

℞. Sul. Quinine, ---------- ℈j.
Ferri Iodidi, ---------- ℈j.
Ext. Nucis Vomicæ, ---------- grs. x.

M. F. Pill, No. 20. Sig.; one at each meal.

May 25th. Mrs. H. called, when I found all appearance of opacity gone and the sight much improved. No pain, and the action of the lids perfect. Pulse much stronger. Looking quite healthy. No appearance of menses. Complains of having ordinary headache at times, which is attributable to lingering debility.

To continue the pills, and to take two grains sub. nit. bismuth, after eating, for a slight uneasiness in the stomach, sometimes felt.

October 14th. Since last report, I have seen the patient occasionally, and she seems to enjoy perfect health. Her eyes are entirely well.

It will be seen that, in this case, constitutional treatment only, was employed. Not even a laxative was prescribed.

The object in reporting it was, to make it a theme of some observations upon the prevalence of scrofula in this region of country. This woman had been healthy, till, by some cause, inflammation of the eyes occurred. Instead of being confined to the conjunctiva, the cornea became affected. There was every reason to believe that, if medication of an appropriate character had not been adopted, destruction of tissue would have resulted, or deposition of lymph in the laminæ of the

cornea, causing total loss of sight. The constant drain upon the strength, caused by secretion of milk, and the antiphlogistic course followed by the first doctor, reduced her very rapidly. The rapidity with which the morbid deposition in the cornea was removed, after commencing tonic treatment, shows how important it is to guard the system against every cause which tends to disorganization of tissue.

The brother above mentioned came to me in September last, for biennial examination, as a pensioner. He is laboring under opacity of the cornea of both eyes. At some points, the infiltration is so thick as to cause protrusion. Vision in one eye is totally destroyed and nearly so in the other. The disease commenced with ordinary conjunctivitis, but being of a strumous diathesis, the fibrous tissue became affected, almost immediately.

With a view of improving the general health and the prevention of destructive ulceration, more than any hope of restoring the eyesight, I prescribed this man as follows:—

℞. Liquor Iod. Ferri, ---------- ℥j.
Iod. Potassii, ---------- ℥ss.
Aqua Puræ, / Syr. Zinzibins, } āā, ---------- ℥ij.
Essence Cinnamon, ---------- ℥j.

M. Sig. Teaspoonful *mane et nocte.* Also—

℞. Hyd. Bi-chloridi, ---------- grs. ij.
Sul. Quinine, ---------- ℈j.
Ext. Conii Mac., ---------- ℈j.
" Gentian, q. s. ----------

M. F. Pill, No. 40. Sig.; one at night.

Saw him a few days since, and some improvement in the appearance of the eyes. Less pain on exposure to a strong light, and more ability to open and control the lids. During the last summer, I was consulted in the case of a young sister of the same family, but nine years of age.

She had no appearance of disease of the eyes, but there was the same drooping and uncertain look, commonly seen in feeble persons. There was increased sensibility to light. While quite a child she had rheumatism, and for five years she has had pal-

pitation, with dyspnœa, on exertion, and constant pain in the cardiac region. The left side of the chest is much the fullest, and all the physical signs of hypertrophy. There was also fulness of the abdomen, with every indication of enlargement of the mesenteric glands. Anthelmentics being always in order here among the children, gave santonine and hyd. cum. creta, with the effect to bring away a number of round worms. Then followed with iod. potassii, iod. of iron, and sul. quinine, with the effect to show a decided improvement in the general health.

She is now able to attend school, and, with the exception of the cardiac troubles and the tumid abdomen, is well. Nothing but a judicious course of tonics will prevent her from filling an early grave, from strumous disease of the mesentery. Should inflammation occur in the eyes, from any cause, disease of the cornea would, doubtless, result at once. This family are by no means of the class known as "*poor whites.*" They suffered from privations during the war, but since 1864, have lived comfortably on a farm. If, then, we find a tendency to struma in a family such as this, what may we not expect to see in that class who subsist mostly upon "*hog and hominy,*" and destitute of good shelter, as well as of proper food, are exposed to the numerous causes of disease. But I have extended this communication further than was first anticipated.

ARTICLE XLV.

REMOVAL OF A HORSE-SHOE PESSARY FROM THE FEMALE BLADDER

By W. H. BYFORD, M.D., of Chicago.

Reported by B. T. BUCKLEY, MD., Freeport, Ill., President of Stephenson Co. Med. Soc.

On the night of the 28th of February last, was called to visit Mrs B., a young married lady, residing about two miles from the city. Found her suffering severely from pain in the region of the bladder. She informed me that her father's family physician had visited her on that day, and, after an examination, told her that she was laboring under antiversion of the uterus,

and that it would be necessary to introduce some instrument to keep the organ in situ. Her physician, being in very poor health, was taken worse at this visit (and it was the last one he ever made), went home, took to his bed, lingered about five weeks, and died. Apprehending that there was some retention of urine, I introduced the catheter, but found the bladder empty, or nearly so. Examined the vagina, but found no pessary. There was slight prolapsus, with anti-flexion. She had become pregnant just previous to this occurrence; and I supposed that these paroxysms of pain were the result of increased sensibility of the uterus and urinary organs, consequent upon partial displacement, and such as we sometimes meet with in cases of recently married women, without any displacement of the uterus whatever. I visited her two or three times a week, for a short time, without any benefit. Drs. DePuy and Mease were called in consultation. After receiving a history of the case, and making an examination, concurred in my opinion or diagnosis of the case. I carried out the suggestions as to treatment, made by the consulting physicians, a short time, without any improvement. The paroxysms became more frequent and severe. By this time, the patient was suffering from constipation, dysuria, and more or less tenesmus. The uterus had passed down considerable below its normal position. I several times attempted to put her under the influence of chloroform, for the purpose of making a more thorough examination, but the effect upon the patient was so distressing, that I was compelled by patient and friends to desist. She gradually grew worse; the symptoms became somewhat alarming from almost constant pain. Dr. J. B. Lyman, of Rockford, was called as additional counsel. She now consented to the use of anæsthetics, and, accordingly, was put under the influence of chloroform. Dr. Lyman introduced a sound into the bladder, and, by digital examination, ascertained that there was some foreign substance in that viscus; and we came to the conclusion that it was a pessary. Upon further consultation, the patient was allowed to rest for the night, and Dr. Wm. H. Byford, of Chicago, was sent for, who, without much difficulty, effected its extraction.

There were present Drs. Lyman, DePuy, Mease, and myself. The patient was placed under the influence of chloroform, and another thorough examination made. The removal was accomplished by dilating the urthera, and extracting it with forceps. The little finger of the left hand was first passed into the bladder, and search made for the instrument, but it was beyond reach of this member. The forefinger of the left hand was next introduced, and the pessary could be felt so remote as to make it impossible to seize hold of it or exactly determine its position. The bladder contained several ounces of urine, and the instrument was easily displaced by the motion of the finger. After the urine was drawn off by a catheter, the index-finger was again inserted into the bladder, when, in consequence of the contraction of that organ, the pessary was brought down close to the pubis, at the opening into the urethra, and was easily controlled. By the forefinger, the pessary was drawn close up to the urethra, with the open end at the right hand of the operator, and the end of one of the branches placed as nearly as possible to the entrance of that canal. Ricord's phymosis forceps was next passed into the bladder, the end of the bar seized, and extraction commenced; but very soon the hold upon it gave way, and the instrument returned to its old position. It was again properly placed by the introducer's index-finger, and a second time taken hold of by the forceps. The bar was easily drawn out this time to the external orifices of the urethra, and by turning strongly down toward the vaginal opening, one-third of the instrument showed itself, and the balance quickly followed.

The time occupied by the efforts at extraction was about ten minutes. All present were surprised at the ease with which the fingers were passed through the urethra and the dexterity of the manœuvre that brought that disagreeable occupant of the bladder to light. As before remarked, the patient was a young married woman, and the genital organs were of virgin, etc., while the pessary was tolerably large. It measured one and three-quarters inches, across from one side to the other, and was two inches and a-half long. The diameter of

the rod was three-eighths of an inch. The extracted instrument was incrusted with the urinary deposits pretty much all over. It had been in the bladder about three months. The patient promptly recovered, with no treatment, save the use of some light anodynes, and is progressing favorably in her pregnancy.

There can be no doubt, now, that this pessary was introduced into the bladder by mistake, instead of the vagina, which, I think, might very easily be effected. The physician, who was a man of experience, and had used the pessary frequently before, was sick, and laboring under the effects of opium, to such an extent as to be easily confused; and, in fact, though the pessary had disappeared, so that he could not find it, was entirely unable to account for its loss. Dr. H. R. Storer, of Boston, records the only other case, so far as I am informed, of this singular accident, and gives a very graphic description of the difficulties he met with when extracting it, in the *Medical Record*, of July 15th, 1868. Dr. H. W. Jones, of Chicago, a short time since, saw a case in which the pessary was accidentally introduced into the rectum, instead of the vagina.

ARTICLE XLVI.

THE SUM AND SUBSTANCE OF ANTISEPTIC SURGERY.

By E. ANDREWS, M.D., Prof. of Principles and Practice of Surgery, Chicago Medical College.

There are many practitioners whose time and opportunities have not enabled them to give carbolic acid, and its kindred agents either a careful trial or full investigation by reading, and who, consequently, do not know how much is truth, and how much is error in what is said on the subject. This article is intended to supply a want by making a condensed statement of this part of surgery. First, then,

WHAT WILL CARBOLIC ACID ACCOMPLISH?

Carbolic acid, creasote, sulphurous acid, permanganate of

potash, and all the other poisons, which destroy animalcular life without too much irritation to human tissues, act in the same manner, and produce similar results. Carbolic acid being most used, is, however, here taken as the type.

1. In compound fractures of the most aggravated character, it prevents almost absolutely all suppuration, and most of the soreness and swelling, causing large lacerated openings to go through their process of healing, without any unpleasant smell, and often without the formation of a spoonful of pus.

2. Lacerations and compound fractures laying open large joints, such as the knee, are often healed by it without suppuration, and without exhaustion. Lacerated flesh wounds follow the same law.

3. Lumbar abscesses, and other large collections of pus, opened under a carbolic acid covering, close again by first intention, and after the pus is evacuated, the cavity ceases to produce any more, secreting only a clear bland serum. Meanwhile, the patient, instead of falling into hectic in the usual manner, grows fat and strong, and ultimately recovers.

4. Fistulas communicating with carious bone, may be often healed permanently, without operation, the suppuration ceasing, and the granulations first firmly enclosing the dead bony spicula, and then effecting their removal by absorption. This is, perhaps, the most surprising of the effects of carbolic acid.

5. In surgical operations it may be used to promote union by first intention, and to prevant erysipelas, pyæmia, and other septic forms of disease.

WHAT IT IS.

Carbolic acid (formerly called phenic acid) is a hydrocarbon obtained from coal tar. It can scarcely be termed a true acid, its acid properties being almost nothing. It more properly belongs to the class of alcohols. When pure it crystalizes. It coagulates albumen, and acts as a slight caustic on the tissues, being in that respect rather feebler than nitrate of silver.

DIFFERENT FORMS.

When the crystals are mixed with 5 per cent. of water, they deliquesce and form a permanent fluid. If more water be

added it will not mix, but floats on the top, taking up into solution only about 6 per cent. of the acid. If the two solutions are shaken together, they soon separate again, the lower one containing 95 per cent. of the crystalized acid, and the upper about 5 per cent. The upper solution is the one generally to be used for injecting abscesses, etc., the lower one being too strong. There are no officinal names for distinguishing these three forms of the medicine, and hence the manufacturers give them all sorts of titles. The only reliable way is to buy the crystals, and prepare the solutions by adding water.

THE THEORY OF ITS ACTION.

The atmospheric air always contains, floating as dust in it, a great number of vegetable and animalcular germs, which light upon exposed organic fluids, and multiplying by millions hourly, convert the organic material into a putrifying mass. If the germs be wholly excluded, it is found that putrifaction does not occur, even though warmth and moisture both are present.

Prof. Lister maintains that these putrefacient animalcules are the cause of putridity and irritation, and that the irritation causes the suppuration, and hence, that when no other strong cause of irritation is present, the effusion of pus from any raw tissue may be wholly prevented by simply applying carbolic acid, and killing all the animalcules, and preventing the access of any new ones.

HOW TO USE IT.

Prof. Lister uses rather complex methods, which can, by no means, be carried out easily by American surgeons, outside of the large cities. During the past year, I have devised various ways of simplifying the applications, with excellent success; and I am glad to see by late European advices that he himself is now resorting to some of the identical modes which I had planned independently.

I have found the following three preparations the most convenient:—First, take about one ounce of the crystals, or of the 95 per cent. solution, which is nearly as strong, and agitate it in a bottle, with 10 or 15 ounces of water; allow it to settle a few minutes, and the clear 5 per cent. solution will appear at

the top, and the surplus of acid will settle to the bottom, in the form of the 95 per cent. solution. Also, take about one ounce of the crystals, or of the 95 per cent. solution, and dissolve it in any oil. The best is a pure quality of castor oil, both because it has more viscidity, and is, therefore, better for dressings, and because it will dissolve the 95 per cent. solution of the acid completely, making a perfectly bright, clear compound, which is elegant in its appearance. Other oils precipitate the 5 per cent. of water, in the form of an emulsion, which gives them a dull look. Finally, take eight parts of collodion, and mix them with one part of carbolic acid. We are now armed with three preparations, *viz.:* the carbolated water (5 per cent. solution), the carbolated oil, and the carbolated collodion, and are prepared for action.

TREATMENT OF COMPOUND FRACTURES.

The fracture being adjusted and splints applied, the wound should be washed to its remotest corner, with the 5 per cent. solution, using a syringe, if necessary, to throw it fully into deep parts. This will kill all the animalcular germs present in the wound. The next step is to prevent the admission of any more. For this purpose, take a pledget of lint or cotton batting, large enough to fill the wound, if it is open, or to more than cover the orifice if closed, and lay it in or on, as the case may be. If elegance is sought after, a piece of tinfoil or oiled silk may be placed over the lint, to prevent the oil from soiling the outside dressings. Finally, confine the whole in place with a roller, or with a Mayor's handkerchief. The next day, the injection and dressing must be gently repeated. It should be observed, that new wounds and freshly opened abscesses, whose raw nerves are not yet covered with granulations, often feel the smart of the first wash severely. If so, the second wash may be reduced to one-third strength, gradually increasing again to 5 per cent., or 20 grs. to the ounce. Under this treatment, frequently there is not an ounce of pus secreted during the whole cure, and the bone often unites as promptly as in a simple fracture, an important gain, as all know how prone compound fractures are to slow union.

LUMBAR AND OTHER LARGE ABSCESSES.

These large collections of pus, which often destroy the patient soon after they are opened, may generally be rendered surprisingly harmless in the following manner:—Dip a trochar in carbolated water, and thrust it obliquely into the abscess, so as to make a valvular opening. Let the pus flow as long as it will, or press it gently out, but do not allow a particle of air to regurgitate through the canula, as that would introduce animalcular germs. When the pus ceases to flow, dip a few fibers of cotton batting into the carbolated collodion, lay them over the point of entrance to the trochar, then placing the thumb on the end of the canula, or a cork in it, to prevent any regurgitation of air, draw it out from under the collodionized cotton pressing, the latter, instantly, upon the orifice, to prevent the admission of living germs. In this way, the orifice will be sealed, and a union, by first intention, usually obtained. After a week or more, the abscess will generally be found filled again, when it should be again tapped in the same way. The pus will now be found thinner and more serous. After a longer interval, a third tapping will find the pus almost transparent, and the fourth one often will draw absolutely transparent serum. In this way, the intervals will lengthen, and the abscess, at least, in many instances, be gradually made to wither away and disappear, the patient all the while growing fat and rosy, and presenting a total contrast to the usual results of a lumbar abscess. Sometimes the abscess is clogged with masses of dead areolar tissue, so that it is impossible to evacuate it through the canula. In this case, it may be still possible to draw them out through the tube by slender forceps, dipped before each insertion in carbolated water, or oil; but if this fails, or if the collodion does not produce a union by first intention, or if it has been already opened before coming under treatment, a different method is necessary. We must now proceed by injections. For this purpose, use a 1 or 2 per cent. solution, the first few days, gradually increasing to five per cent., or 20 grs. to the ounce, as the patient becomes used to it. This must be thrown in once a day, filling the abscess

completely. Then allowing the solution to run out, a large pledget of cotton, dipped in carbolated oil, must be placed over the fistula, and confined by a bandage. It will be the neater and better if a piece of druggist's tin-foil is placed between the cotton and the bandage. This dressing must be repeated daily. Frequently the flow of pus will continue, gradually diminishing for one, two, or three weeks under this treatment; but it will be almost always brought under control, and the abscess at length discharge only a little transparent serum, without any odor. This may continue many months, but the patient is saved from hectic, grows fat and vigorous, and his life is commonly saved.

CARIOUS JOINTS.

Prof. Lister claims that carbolic acid will heal up a fistula over necrosed bone, and cause its absorption. In my own practice, I have been able to do this, where the sequestrum was of cancellar tissue, or a fragment of compact tissue, of small size; but large fragments of compact bone, two or three inches long, have, in my hands, resisted the treatment, and required operation. The principle appears to be this:—Cancellar bone, if suppuration be suppressed by the injections, becomes permeated with the granulations which hug close to all the little spiculæ, and being in absolute contact, effect their absorption; but large compact fragments cannot be thus interpenetrated with living granulations, and hence their absorption, if accomplished at all, would, probably, be too slow to be waited for. At any rate, such is my experience up to the present time. The smaller joints do admirably under the daily carbolated injections and dressings. I have repeatedly healed them up in a complete and permanent manner, after the probe showed the articular surfaces of the bones to be thoroughly carious. Anchylosis, of course, occurs. Finger-joints may be often healed in two weeks, but larger ones require much more time. I have an elbow whose articular surfaces were perfectly carious, six months ago; the limb was swollen and red, discharging large quantities of stinking pus, and the patient was emaciated, cadaverous, and hectic. Under the antiseptic dressings, he has grown plump and vigor-

ous, the swelling has all disappeared, and the skin resumed its natural whiteness. For three months, I have been unable to find any dead bone with the probe, and there is no discharge of pus, yet the fistulas are still permeable to the probe, and probably will not close under several months more.

Wounded and carious knee-joints can often be treated with splendid success in the same way, compared with the disasters which used to follow these conditions. I have one now on hand which does not discharge a teaspoonful of pus in a week, and the patient will save both his life and his limb. I have seen one compound fracture, penetrating the knee, thus treated, where the joint did not even inflame, and was not anchylosed. Some carious knees, however, are too extensively diseased to admit of final cure, and the antiseptic treatment is only useful to arrest exhaustion, and enable the surgeon to get them up to a condition vigorous enough to bear an operation. The abscesses of hip-disease often respond admirably to the same treatment.

INCISED WOUNDS.

Wash the wound thoroughly to its remotest recesses with the carbolated water, then close it with sutures, and add adhesive straps or carbolated collodion. If the straps are used, a pledget of lint, dipped in carbolated oil, should be laid over the wound and covered with tin-foil and bandages. In this way, union by first intention is greatly promoted, and the risk of erysipelas almost absolutely annihilated.

If any one, however, supposes that carbolic acid is infallible, he will be disappointed. Many particular cases occur where it partly fails of its end. In these instances, it will often be found that a solution of one part of the officinal sulphurious acid to two parts of water does better. Solutions of permanganate of potash, two grains to the ounce, sometimes do well; and, in the same manner, other antiseptic solutions, if used in sufficient strength, occasionally succeed. Many persons miss entirely the effects of the antiseptic treatment, because they are inefficient in its application. If they do not effectually destroy every animalcule in the abscess or wound, and absolutely bar

out the access of every new germ in the living state, they accomplish nothing. The washing and injection must be thorough, and the carbolated outside dressings must cover the whole orifice and its vicinity. When these principles are observed, the success is wonderful.

On the whole, it must be acknowledged that the use of carbolic acid has revolutionized certain branches of surgery, and enables us to save many limbs and lives which would formerly have been lost. I would advise no one to make a hobby of it, but that it is a remarkable addition to the resources of our art is a fixed and undeniable fact.

The Clinic.

COOK COUNTY HOSPITAL.

ANEURISM OF AORTA,

WITH NOTES OF A CLINICAL LECTURE, BY PROF. H. A. JOHNSON, ATTENDING PHYSICIAN.

By WM. E. QUINE, M.D., House Physician.

History.—Jeremiah C., *æt.* 46, Ireland, blacksmith; admitted Sept. 30th, 1869. Has been more or less subject to rheumatism during the last twelve years. One year ago, complained of pain in both mammary regions, which (four months later) was accompanied by dyephagia, dyepnœa, sore throat, hoarseness, incessant cough, and copious frothy expectoration. To these symptoms, which are rapidly increasing in severity, there is now added anorevia, great feebleness, and profuse diarrhœa.

Examination—Inspection.—Moderate emaciation, lividity of skin, features expressive of great anxiety, remarkable prominence of third, fourth, and fifth right costal cartilages, elevation of left shoulder, and diminished respiratory movements of left side.

Mensuration.—Circumferential measurements of left side, a half inch greater than of corresponding regions of right.

Palpation.—Vocal fremitus exaggerated on right side, absent on left. Left intercostal depression on inspiration. Prolonged heaving impulse against third, fourth, and fifth right costal cartilages, coincident with ventricular systole. Apex of heart beats two inches below, and one inch outside left nipple.

Percussion.—Volume of resonance of left side increased. Percussion note of right infra clavicular region is of higher pitch and less intensity than natural; over third, fourth, and fifth, right costal cartilages flat; and over remainder of right side, natural.

Auscultation.—In right infra clavicular region the inspiratory murmur is irregular and jerking, and the epiratory prolonged; in remainder of right chest, puerile respiration. Over left side, respiratory murmur is absent, except during forced inspiratory efforts. Vocal resonance diminished on left side; increased on right. Friction sounds, coincident with both sounds of heart, are heard at its apex, and above notch of sternum. A low, musical, prolonged murmur, heard best over second, third, and fourth right costal cartilages, and not at all in back, follows immediately the second sound of heart.

NOTES OF CLINICAL LECTURE BY PROF. JOHNSON, OCT. 5TH, 1869.

Diagnosis.—The history and physical signs point to a lesion of thoracic viscera, which interferes with performance of their functions. What is its nature? Is absence of respiratory murmur in left lung due to tuberculous or cancerous infiltration, or to fluid in pleural cavity? No. Because this lung is even more resonant than the other. Is it due to occlusion of trachea, or of left bronchus? Cannot be trachea, because right lung performs its function. Must be bronchus. Is this occlusion caused by foreign body within bronchus, or by pressure upon it. Must be pressure upon it; because by forced efforts left lung can be inflated, and such efforts would cause foreign body to become more tightly wedged, and the more perfectly prevent entrance of air. Is the prominence of right costal cartilages, due to displacement of heart by emphysema of left

lung, or by fluid in left pleural cavity, or by ascites, or an abdominal tumor? No. Because apex of heart is further to left of sternum, and lower than natural. Is the heaving impulse against right costal cartilages due to hydrops pericardii, or hypertrophy of heart, with dilitation? No. Because, as in first instance, there is no diffuse impulse, and no triangular area of dulness; because cardiac sounds are much louder than natural; and because of heaving impulse to right of sternum. A heart does not generally dilate in this direction, and never attains this magnitude. Therefore, because of the small thready pulse, prominence of right cartilages, pressure upon left bronchus, and œsophagus (all of which are in relation with aorta), and prolonged heaving impulse against right cartilages, with murmur, we are justified in calling this aneurism of aorta.

Causes.—Aneurism never occurs in this region, except as the result of previous disease of arterial coats. Whether the disease consists in the distinct deposit of patches of atheroma, of fat globules in the interstices, or of replacement of fat for normal elements, the natural elasticity becomes lost, proportionately to amount of change. Hence, the artery becomes less able to contract on its contents, and yields to the repetition of shocks which it sustains by ventricular contractions. Rheumatism, and gout, very frequently precede aneurism, and it is a question in this case whether the dilitation is due to a deposit, similar to that which has probably taken place in apex of right lung, and there called tubercle, or to a deposit similar to that which occurs in and around his joints. Age exercises a powerful predisposing influence, as it is rarely met with in childhood and advanced life.

Kinds.—The kinds which usually affect the aorta, are the fusiform, and false sacculated. The first consists not only in equal expansion of all the coats through the whole circumference of the vessel, but there is positive elongation as well. The second consists in a tumor that springs from side of vessel, with interior of which it communicates by a small aperture, and is caused by rupture of one or two of its coats with dilitation of others. Not unfrequently the latter springs from side of

former. Judging from prominence of right cartilages, from evident pressure on left bronchus, and œsophagus, from absence of loud rasping murmur, and well-marked vibration, we have in this case a fusiform aneurism involving the whole arch.

Prognosis—Is of course grave. Although spontaneous cures sometimes occur in vessels of smaller size, by the gradual deposition of laminated fibrin within sac, which may result in occlusion, it is not to be expected in one of this magnitude, but rather that the patient will finally succumb to exhaustion caused by pressure upon, and consequent interference with, the functions of important parts, or to hæmorrhage, caused by rupture of sac externally, or into trachea, or bronchi, or œsophagus, or pleural, or pericardial cavity.

Treatment.—The most we can hope to accomplish is the palliation of the more distressing symptoms, of the disease and retardation of its progress; and this can be best effected by arterial sedatives to lessen the force of the heart's impulse, so as to diminish pressure upon arterial coats, and nerve sedatives, to diminish sensibility and procure rest. In this case, profuse diarrhœa (probably the peripheral expression of central obstruction to circulation) is an urgent symptom, and also the cough, and dyspnœa.

℞. Acidi Tanici, ----------gr. iij.
Tinct. Opii, ----------gtt. x tertia-hora,

and

℞. Tinct. Verat. Virid. } āā----------gtt. iv.
Acid Hydrodcyanici, }

also, every three hours.

Autopsy.—On reflecting the soft parts, there was evident prominence of third, fourth, and fifth right costal cartilages, with no loss of tissue. Tubercle in apex of right lung. Visceral and parietal layers of pericardium firmly adherent. A fusiform aneurism arose from that portion of aorta contained within pericardium, and extended to eighth dorsal vertebra. Tough decolorized fibrin adhered to some parts of the walls, and to others deposits of apparently more recent date, as indicated by the retention of red coloring matter. A large stellate open-

ing from sac into the œsophagus. Stomach distended with dark fluid blood, and friable clots. Part of bodies of sixth, seventh, and eighth dorsal vertebræ absorbed. The heart was hypertrophied, but could not be weighed, as it was kept attached to specimen.

Foreign Correspondence.

R. R. Allgemeinen Kraukenhause,
Vienna, *October 30, 1869.*

Dear Examiner:—As has been the case in many instances, it was vacation when I visited Prag, and I was unable to learn many particulars about medical matters. The hospital has about 800 beds, and presents about the same opportunities as Vienna for studying obstetrics and diseases of children. The number of cases is smaller, but there is only about one-fourth the number of students (300).

Prof. Scanzoni and Tröltsch, at Wurtzburg, attract many admirers. I have heard that one of Scanzoni's assistants is an American.

A reading room has been opened in the hospital, which is supplied with about fifty of the leading medical journals of the continent. The *London Lancet*, and *New York Medical Record* are the only two English journals. Several American journals will be added after the first of January. The rooms are open from 10 A.M. to 11 P.M. The terms of admission are 60 cts. per month.

The hospital here has undergone some changes since I last wrote from here. Many of the wards and rooms have been freshly painted, grained, frescoed, etc., while the whole building has been thoroughly cleaned outside and inside, and presents a much finer appearance than when I went away. Several masons have been at work enlarging the windows, and adding numerous ventilators, which has greatly improved the air in the wards.

Profs. Hebra and Sigmund have recently been made Professors Ordinary, and Prof. Zeisl Primarius Mauthner, formerly Assistant of Prof. Arlt, and one of the best eye teachers in Germany, has been appointed Professor at Innsbruck. There are about thirty American students here, two of whom are ladies. The cost of many private courses is somewhat greater than last year.

I think I will close this letter by a brief reference to tumor cavernosis, as several cases have recently fallen under my observation, and as the best method of treatment still stands in discussion.

Telangiektasie is another species of tumor, which, with the one above mentioned, are embraced under the common name of angiome. By this term angiome, we understand a tumor composed of vessels bound together by connective tissue. Examined microscopically, they present a picture similar to that of the corpus cavernosum of the penis: hence they are often called erectile tumors, as they increase or decrease in size according as they are or are not filled with blood.

Several theories have been advanced as to the manner of development of the tumor cavernosus. For example, one author supposes that the venous capillaries and small veins become enlarged or varicose, until their walls press against each other and become gradually absorbed. Another, that small caverns are formed, first in the connective tissue, and become later, in connexion with the vessels, and that perhaps new blood corpuscles were formed from the cells of the connective tissue, while yet another maintains that the calibre of the vessels is enlarged by the contraction (cicactrical) of connective tissue. Many other similar suppositions might be added. The internal wall of these caverns is generally paved with spindle-shaped cells. Many of these theories would lead us to suppose that the cavernous tumor is the result of inflammation, yet we seldom observe any signs of inflammation in the course of the disease, if I may so call it, and perhaps yet seldomer discover any signs of this process with the microscope. The diagnosis of these tumors is not always easy, as they are often of a fluctuating

feel, and can be mistaken for cysts, abscesses, aneurisms, lipomas, etc.; also, with telangiektosii, when this is not superficial. They ordinarily occur in the subcutaneous tissue, but frequently embrace the muscles, and I think Prof. Schuh states in his pathology that they frequently are developed in the bones, but later writers say this occurs very seldom. I have also seen them in the liver and spleen, and they occur in the kidneys. Of seven cases that I have chanced to see in the last two months, the tumor was situated on the upper lip in two cases, at the inf. angle of the scapula in two cases, and of the other three, one was on the temporal region, another on the cheek, another just above the knee. All were on children, under five years of age, and four on infants.

Prof. Heine, of Heidelberg, has lately written quite an extensive article on "Angioma Arterialle Racemosum." A large per cent. of his reported cases was situated about the head, with a prediliction for the ear.

As is well known, zelangiektain, or mother-mark, is generally hereditary, and ordinarily the tumor cavernous develops itself in early youth, and may be said also to be hereditary, or the result of a similar diathesis, as they extremely seldom occur in later life, when we most generally see other varicose conditions. As above mentioned, telangiektosii generally affects the superficial, sometimes the deeper tissues. Its course is slow and painless—commonly comes to a standstill—sometimes continues to increase. Billroth saw such a tumor as the first on a boy five years old. The tumor cavernosus is seldom congenital. Its occurs most frequently on the face and extremities—less frequently on the body. There is sometimes weakness of the muscles of, or near the part affected, and frequently pain in the region. The tumor cavernosus may become dangerous to life when embracing the muscles and bones. It sometimes becomes greatly reduced in size by thrombus, but a case of complete spontaneous obliteration I am unable to find record of. Various modes of treatment have been tried, such as compression, ligation of the arteries, injection of various substances, removal by knife, galvano caustic, etc. The first two

methods are fruitless in most cases. The galvano caustic is a favorite method with Prof. Billroth at the present time. About a year ago, I saw a patient three years old, in his wards, with a tumor about as large as a hen's egg on the upper lip. Repeated injections of carbolic acid, tinct. iodine, liquor ferri sesqui chloridi, etc., were of no avail. The tumor meantime continued to increase in size. Finally, a wire, armed with a needle, was drawn through the tumor, and the suds attached to the battery. The tumor was thus transfixed in various directions by the wire at white heat. The tumor decreased in size rapidly, and, after one or two repetitions of the process, the child was discharged cured. Removal by knife would have necessitated a plastic and consequent deformity of the face. In other cases, it is sufficient to puncture the tumor in several places with the caustic needle. While in other cases the whole surface of the tumor may be cauterized, and so soon as the slough becomes detached, the process may be repeated, if any traces of the tumor remains. The wound is treated as an ordinary ulcer. By this method there is little or no fear of hemorrhage, which is often a troublesome complication when these tumors are removed with the knife. I may also add, that the galvano caustic is extensively used here in amputating the neck of the uterus in prolapsus, amputating the penis, cauterizing ulcerating epitheliomas, removing polypous tumors, and for other similar operations. Yours, truly, F.

Combination of Chloroform with Opiates for the Relief of Pain.—Dr. W. Marshall strongly recommends (*Glasgow Medical Journal*, May, 1869) this union of remedies for anodyne purposes. From 10 to 20 minims of chloroform are combined with one or two drachms of compound tincture of camphor (if the pain be moderate), or 10, 20, or 40 minims of Battley's sedative (if it be severe). This generally produces sleep within a few minutes, and its effects are more lasting than those of an opiate alone, and without its disagreeable after-effects. It ought to be given in some thickish solution, such as mucilage; otherwise the chloroform will fall to the bottom. —*The Practitioner.—Richmond and Louisville Med. Journal.*

Selections.

PHYSIOLOGICAL ACTION OF THE HYDRATE OF CHLORAL.

Dr. B. W. Richardson made an extremely interesting report on this subject to the Biological Section of the British Association for the advancement of Science, at its recent meeting, from which we make the following extract:—The hydrate of chloral, for the introduction of which into medical practice we are indebted to Liebreick (known for his researches on protagon), is a white, crystalline body, soluble in water, and yielding a solution not very disagreeable to the taste. It is made up by the addition of water to the substance chloral. Chloral, the composition of which is C_2HCl_3O, is the final product of the action of dry chlorine on ethylic alcohol. It is an oily fluid, thin, colorless, volatile. The specific gravity is 1.502 at 64° Fahr., and it boils at 202° Fahr. It has a vapor density of 73, taking hydrogen as unity. The odor is pungent. When chloral is treated with a little water, heat is evolved, and small stellate white crystals are formed as the fluid solidifies. The solid substance is the hydrate of chloral, $C_2HCl_3OH_2O$. The hydrate is slowly volatilized if it be exposed to the air, and the odor of it, were it not pungent, is so like melon as to be hardly distinguishable from melon. When heat is applied to the hydrate, it distils over without undergoing decomposition.

When to a watery solution of hydrate of chloral caustic soda or potassa is added, the hydrate is decomposed, chloroform ($CHCl_3$) is set free, and a formate of sodium or potassium, according to the alkali used, is formed. It was on a knowledge of this decomposition by an alkali that Liebreich was led to test the action of the substance physiologically. He conceived the idea that in the living blood the same change could be effected, and that the chloroform would be liberated so slowly that anæsthesia of a prolonged kind would result. To try this, he subjected animals to the action of chloral, and even man, and proved that sleep could be rapidly induced without the second stage of excitement common to the action of chloroform, when it is given by inhalation. Liebreich produced in a rabbit, by a dose of 0.5 gramme of the hydrate of chloral, a sleep which lasted nine hours. This dose was equivalent to 0.35 of chloral, and to 0.29 of chloroform. The symptoms, he found,

were like those produced by chloroform. In some cases, he gave the hydrate to the human subject. The first case was that of a lunatic, to whom he administered 1.35 gramme. No irritation was set up, and five hours of sleep was obtained. In a second case, he gave internally a dose of 3.5 grammes to a man suffering from melancholia, by which he produced a sleep of 16 hours.

Such, said Dr. Richardson, was an epitome of the facts placed before him at the time when he commenced to make his experiments. In setting out on his own account, he first prepared a standard solution of the hydrate. He found that 30 grains dissolved in 40 grains of water, and formed a saturated solution, the whole making up exactly the fluid drachm. The standard solution prepared in this way was very convenient.

He next proceeded to enquire whether, by the addition of hydrate to fresh blood, chloroform was liberated. This was proved to be the fact; the odor of chloroform was very distinct from the blood, and chloroform was itself distilled over from the blood, and condensed by cold into a receiver.

The narcotic power of the hydrate was then tried on pigeons, rabbits, and frogs. The standard solution named above was employed, and was administered either by the mouth or by hypodermic injection. The action was equally effective by both methods. The general results was confirmatory of Liebreich's own experience to a very considerable extent. They are as follows:—In pigeons, weighing from 8½ to 11 ounces, narcotism was produced readily by the administration of from 1½ to 2½ grains of the hydrate. In these animals, the dose of 2½ grains was the extreme that could be borne with safety, and a dose of 1½ grain was sufficient to produce sleep and insensibility. The full dose of 2½ grains produced drowsiness in a few minutes, and deep sleep, with entire insensibility, in twenty minutes. Before going to sleep, there was, in every case, whether the dose was large or small, vomiting. As the sleep and the insensibility came on, there was, in every instance, a fall of animal temperature; and even in cases where recovery followed, this decrease was often to the extent of five degrees. The respirations also fell in proportion, declining, in one case, from 34 to 19 in the minute, during the stage of insensibility. From the full dose that could be borne by the pigeon, the sleep which followed lasted from three and a-half to four hours. Six hours at least was required for perfect recovery. During the first stages of narcotism in pigeons, the evolution of chloroform by the breath was most distinctly marked.

In rabbits weighing from 83 to 88 ounces, 30 grains of the hydrate were required in order to produce deep sleep and insensibility. A small dose caused drowsiness and want of power in the hinder extremities, but no distinct insensibility.

When the full effect is produced in rabbits from the administration of the large dose, the drowsiness comes on in a few minutes: it is followed by want of power in the hinder limbs, and, in fifteen minutes, by deep sleep and complete insensibility. The pupil dilates and becomes irregular; the respiration falls (in one case, from 60 to 36 in the minute), and the temperature declines 6° Fahr.; sensibility returns with the rise in number of respiratory movements, but, in some cases, falls again during the process of recovery. The drowsiness, or, if the animal is left alone, what may be called sleep, lasts from five and a-half to six hours. But it was observed that the period of actual anæsthesia was very short, lasting not longer than half an hour, after which the skin seemed rather more than naturally sensitive to touch. During recovery, there are tremors of muscles, almost like the rigors from cold; they are due, probably, to great failure of animal temperature.

In frogs, a grain of the hydrate causes almost instant insensibility, coma, and death.

In further prosecution of his research, the author tested, on similar subjects, the effect of chloroform, bichloride of methylene, tetrachloride of carbon, and chloride of amyl. In all the observations with these substances, the narcotizing agent was used by hypodermic injection. It was found, as a result of these inquiries, that seven grains of chloroform, five of tetrachloride of carbon, and seven of chloride of amyl produced the same physiological effect as two grains of the hydrate. Seven grains of bichloride of methylene induced a shorter insensibility. A rabbit subjected to 30 grains of chloroform slept 4 hours and 25 minutes; and a pigeon subjected to 7 grains slept 3 hours and 25 minutes. All these agents caused vomiting in birds, before the insensibility was pronounced, the same as did the hydrate; but in no animal was there any sign of the stage of excitement which is seen when the same agents are administered by inhalation. This fact is most important, as indicating the difference of action of the same remedy, by difference in the mode of administration.

The temperature of the body was reduced by the agents named above, but not so determinately as by the hydrate.

Two animals, pigeons, made to go into profound sleep, the one by the hydrate, the other by chloroform (each substance

administered subcutaneously), were placed together, and the symptoms were compared. The sleep from the chloroform was calmer; there was freedom from convulsive tremors, which were present in the animal under the hydrate, and recovery was, it was thought, steadier. It was observed, and the fact is well worthy of note, that no irritation was caused in the skin, or subjacent parts, by the injection of the chloroform and other chlorides.

The neutralizing action of the hydrate on strychnia was tried, and it was determined that the substance arrests the development of the tetanic action of the poison, for a short period, and maintains life a little longer afterwards, but does not avert death. This subject deserves further elucidation.

When the hydrate of chloral is given in an excessive dose it kills; there are continuance of sleep, convulsion, and a fall of temperature, of full eight degrees, before death.

The *post mortem* appearances were noticed after a poisonous dose. The vessels of the brain are found turgid with blood. The blood is fluid, and coagulation is delayed (in a bird, to a period of three minutes), but afterwards a loose coagulum is formed. The color of the brain substance is darkish-pink.

The muscles generally contain a large quantity of blood, which exudes from them, on incision, freely. This blood coagulates with moderate firmness. Immediately after death, all motion of the heart is found to be arrested. The organ is left with blood on both sides, but with more in the right than in the left side. The color of the blood on the two sides is natural, and the coagulation of the blood is moderately firm. The other organs of the body are natural.

Other observations were made on the changes which the blood undergoes when the hydrate of chloral is added to it. The corpuscles undergo shrinking, and are crenate; and when excess of hydrate is added, the blood is decomposed in the same way as when treated with formic acid. The summary of the author's work may be put as follows:—

Hydrate of chloral, administered by the mouth or by hypodermic injection, produces, as Liebreich states, prolonged sleep.

The sleep it induces, as Liebreich also shows, is not preceded by the stage of excitement so well known when chloroform is administered by inhalation.

The narcotic condition is due to the chloroform liberated from the hydrate in the organism, and all the narcotic effects are identical with those caused by chloroform.

In birds, the hydrate produces vomiting in the same manner, and to as full a degree as does chloroform itself.

The sleep produced by hydrate of chloral is prolonged, and during the sleep there is a period of perfect anæsthesia; but this stage is comparatively of short duration.

The action of the hydrate is (as Liebreich assumes) first on the volitional centres of the cerebrum; next on the cord; and, lastly, on the heart.

Practical Applications.—Whether hydrate of chloral will replace opium and the other narcotics is a point on which the author was not prepared to speak. It is not probable that it will supercede the volatile anæsthetics, for the purpose of removing pain during the performance of surgical operations, but it might be employed to obtain and keep up the sleep in cases of painful disease. This research had, however, led to the fact that chloroform, when injected subcutaneously, in efficient doses, leads to as perfect and as prolonged a narcotism as the hydrate, with an absence of other symptoms caused by the hydrate, and which are unfavorable to its action. This was a new truth in regard to chloroform, and might place it favorably by the side of the hydrate for hypodermic use. Lastly, as the hydrate acts by causing a decomposition of the blood, *i.e.*, by undergoing decomposition itself and seizing the natural alkali of the blood, it adds to the blood the formate of sodium. How far this is useful or injurious remains to be discovered. But while putting these views as to practical application at once and fairly forward, Dr. Richardson said, it was due to Liebreich to add that his (Liebreich's) theory and his experiments have done fine service in a physiological point of view. They have shown in one decisive instance that a given chemical substance is decomposed in the living body, by virtue of pure chemical change, and that the symptoms produced are caused by one of the products of that decomposition. The knowledge thus definitely obtained admits of being applied over and over again in the course of therapeutical inquiry.—*Med. Times and Gazette.—Am. Jour. of Dental Science.*

TREATMENT OF ANEURISM BY IODIDE OF POTASSIUM.

In Vol. 1, p. 253, of the *Gazette*, we reported 12 cases successfully treated. In the *Edinburgh Medical Journal*, for July, 1869, Dr. Balfour, of the Edinburgh Royal Infirmary, adds 11 additional cases, and says, that in all of them, there has been such a measure of success, as justifies him in saying

this treatment holds out an excellent prospect of relief, and even of cure. He knows that spontaneous abatement occasionally takes place without any real improvement; but in all his cases, not only relief, but positive improvement was obtained in every instance. And he thinks that there are many facts which tend to prove that iodide of potash is not only curative in aneurism already developed, but that it also acts remedially and prophylactically in the aneurismal diathesis.

ANEURISM OF THE AORTA.

Case I. Had been under observation for twelve months; the aneurism was reduced under treatment to a dull thud, in the second intercostal space, but no pain or uneasiness was complained of. The patient was able to tend shop.

Case II. Aneurism of the abdominal aorta had remained quite well for more than a year after treatment.

Case III. Aneurism of the innominata, implicating the carotid and subclavian arteries. There was also an aneurism of the abdominal aorta, and a general aneurismal condition of the arteries. He remained comfortable for many months after treatment. His abdominal aneurism could be felt as a hard, firm knot, much diminished in size; his innominate aneurism now never troubles him, but it is not absolutely consolidated, neither is it any longer a true aneurism; for it is restored to the condition of an elastic artery, enlarged fusiformly, of course, but no longer bulging as it formerly did, as a pulsating globular tumor stretching across the trachea.

Case IV. Was an aneurism of the aorta, in a man aged 46. There was a large pulsating tumor to the right of the sternum, extending from the third to the seventh rib, and projecting fully one inch and a-half above the level of the ribs. Part of the tumor was solid; but all below the centre was soft and pulsated fluidly. The dullness extended fully five inches all around the centre of the tumor. He had intense dyspnœa, amounting to orthopnœa, violent, harassing, dry cough.

His food and drink were restricted in quantity; a belladonna plaster was put over tumor; 15 minims of chlorodyne were given every half hour to quiet his cough, and one tablespoonful of a solution of one-half ounce of iodide of potash in six ounces of infusion of chiratæ, was given in tablespoonful doses, three times a day. The patient was relieved in 48 hours and much improved in two months; the cough became very troublesome from time to time, but was relieved by the following prescription:—

℞. Morphiæ Hydrochlor., ---------- gr. j.
Acid Hydrochlor, dilut., ---------- m. v.
Acid Hydrocyan, ---------- ℥ss.
Syrupi Scillæ, ---------- ℥j.
Aquæ Font, ---------- ℥j.

Given in teaspoonful doses every two or three hours.

Paralysis and loss of pulse in the left arm occurred and passed away. A violent serous diarrhœa was relieved by acetate of lead and opium, in small doses, without stopping the use of the iodide.

After five months treatment, the improvement was quite remarkable. The pulsation was very much lessened; the tumor was perfectly solid in every part and visibly decreased in size. The patient was still kept in bed, and the iodide of potash treatment still continued, in the hope of seeing the complete disappearance of this large tumor. But the patient obtained liquor on the sly, and relapsed; still, at the end of nine months, the tumor was considerably reduced in size, the cough was all gone, and the patient, although emaciated to a skeleton, was able to walk out daily.

Case V. Was one of aneurismal dilatation of the aorta. The patient (aged) had suffered for 16 months with severe pain across upper part of sternum, and breathlessness. There was dulness on percussion across the whole of the upper part of the breast-bone. There was a pulsating tumor deep in the tracheal fossa, and a double bruit, extending up into the left carotid. Six drachms of iodide of potash were dissolved in six ounces of infusion of chiratæ, and a tablespoonful given three times a day. The patient was kept in bed, and his food and drink restricted. He was quickly relieved; and in a fortnight the rasping bruit was softened, and the pulsation much lessened.

Case VI. Was one of aneurism of the aorta, which, taken singly, would attract much attention, but is remarkable as one of a series.

The patient, aged 40, had suffered for twelve months with a severe and constant aching pain in the chest. His breath was short and wheezing; cough troublesome, choking feeling on stooping, difficulty in swallowing solid food, pulse at left wrist almost imperceptible. There was a distinct bulging on the upper part of the left side of the chest, most marked over the second rib, and second intercostal space, also decided impulse, and dulness from the clavicle to within two inches of the nipple, over which a double blowing murmur was to be heard. There was also enlargement of the heart and valvular disease.

Pain and sense of choking prevented the patient from sleeping. Two drachms of iodide of potash were dissolved in six ounces of water, and two tablespoonfuls given three times a day, with chlorodyne, ether, and morphine injections, etc., to relieve the cough. In the course of six months, after much suffering from pain and cough, he was materially better, the breathing was easier, cough and expectoration almost gone; but slight fatigue or exposure to cold would bring them back again, and, at one time, there was complete loss of pulse in the left arm, with coldness and excruciating pain, the expectoration became copious, purulent, and bloody. He recovered from this, and during the whole of the next nine months continued to take two drachms of the iodide daily, with the exception of twice, when it caused pain, vomiting, and gastric irritation.

It was not till the end of 18 months that the tumor seemed sufficiently consolidated to allow the patient to get out of bed; and then, although he looked well and healthy, one drachm of iodide of iron was added to his medicine. There was great dulness on percussion of the chest, the sternal ends of both clavicles were dislocated, there was considerable puffiness and enlargement of the veins of the chest, a solid mass could be felt in the tracheal fossa, behind the sternum, over the left subclavian there was a solid tumor, pulsating not very forcibly, and only with a movement of elevation, but more of dilatation, over which no bruit could be heard, but only a dull thud. The patient had no difficulty of breathing or swallowing, could go up and down stairs and walk about, no cough, and aneurism evidently consolidated or consolidating. Dr. Bennett was also satisfied with the reality of the improvement.

Case VII. Aneurism of the aorta in a man aged 22, had lasted nine months, attended with harassing cough and copious purulent expectoration, severe pains in left side of chest and neck, and in the left arm. Pulse 110; heart normal; between second and third left ribs, there was a conical elevation, one inch and a-half long, rising half an inch above the level of the ribs, pulsating fluidly, with thin walls and distensile action. Dulness on percussion, extending from the first rib down toward the sternum, and over this space a pulsatile wave passed from right to left, attended with a tolerably loud and well-marked bruit.

The belladonna plaster, morphine mixture, and iodide of potash, one drachm to the ounce of water, was used in one-half ounce doses, *i.e.*, 30 grains per dose, three times a day. The pain ceased in a few days, in a month the cough was all gone,

his breathing easy, and he comfortable. In a month more, the cough and expectoration had entirely ceased, and the patient thought himself cured. But the pulsating tumor, although lessened in size, had not thickened in its walls, and the bruit was as loud as ever. He left the hospital and relapsed; in a month, cough became harassing and he expectorated 15 ounces of purulent matter in one night. He required ten minims of chlorodyne to keep him from vomiting the iodide; but in six weeks more his cough and expectoration was all gone, he was looking well and gaining flesh, and the pulsations were quieter. At the end of four months the pulsations were so quiet, and the walls felt so solid and dense, that he was able to leave the hospital.

Case VIII. Was rather a case of disease of the aortic valves, attended with violent palpitation, severe pain over the heart, difficulty of breathing, with feeling of suffocation, on walking or going up stairs, all of which was relieved in a month by one-half drachm doses of the iodide, three times a day.

Case IX. Was an aneurism of the innominata, in a patient aged 37, sick for three months with beating in the throat, pains shooting down from there into the right shoulder and arm, and especially up the right side of neck and head. On the right of the tracheal fossa there was a tolerably firm, but distinctly expanding, pulsatile tumor, rising up out of the chest, and nearly two inches in diameter. There was dulness on percussion, a dull thud, but no bruit on auscultation, propagated up the carotids, but not along the subclavians. Pulse 120. He took one-half drachm of the iodide three times a day, for three months, when the tumor was quite firm and solid, no longer dilating, but not materially lessened in size; and nine months after he was able to work, the tumor having almost disappeared, although there was still excessive pulsation.

Case X. Was an aneurism of the aorta in a man aged 47, with cough, pain in the chest and down left arm, followed by great swelling of it; large pulsating tumor of right side. The patient had pain in the head and coryza, from the use of the iodide, but tolerance was soon established. Case is still under treatment.

Case XI. Was one of the aorta, which had been kept in abeyance for six years, with the iodide, taken of his own accord, while following his business as a peddler. He was then treated in hospital, by recumbent posture, restriction of food and drink, and drachm doses of the iodide, three times a day. In two months, he was much relieved, pulsations were

no longer perceptible. Finally, while sinking from dropsy, he suddenly died of hemorrhage from the mouth. The heart and kidneys were sound, the aneurism did not press upon the trachea, bronchi, or gullet, the whole ascending aorta was atheromatous and calcareous; the middle coat greatly thinned; the mouth of the aneurism was three inches vertically and two inches across; the aneurism itself was four and a-half inches in breadth, and five inches long. A second aneurism of the size of a walnut rose from the right side of the aorta and pressed on the right auricle so as to occasion the dropsy. The larger aneurism contained firmly adherent fawn-colored clots, and some large, softer, and dark clots. The aneurism had not ruptured, and Balfour thinks it affords an apt illustration, not only of the mode of cure of an aneurism, but of one of those uncommon occurrences (the pressure of the right auricle), which rendered a well-devised and successful mode of cure abortive.—J. C. P.—*N. Y. Med. Gazette.*

Book Notices.

Annual Report of the Board of Regents of the Smithsonian Institute, for the year 1868.

This is an octavo volume of 473 pages, filled with matter of much interest to men of science, and very valuable for reference.

Published at the Government Printing house in Washington, D.C.

Diseases and Injuries of the Eye: Their Medical and Surgical Treatment. By George Lewson, F.R.C.S. Surgeon to the Royal London Ophthalmic Hospital, Moorfields; and Assistant-Surgeon to the Middlesex Hospital. Philadelphia: Lindsey & Blakiston. 1869. Pp. 236. Price, $2.50. For sale by W. B. Keen & Cooke, Chicago.

This work is designed as a manual or text-book for students and general practitioners. It presents a convenient summary of the present status of Ophthalmic Science, in regard to the diagnosis and treatment of diseases of the eye. From the

hasty glance we have taken of its contents, we think it will be found a very convenient and useful work.

The Pathology and Treatment of Stricture of the Urethra and Urinary Fistula. By Sir Henry Thompson, F.R.C.S., Surgeon Extraordinary to H. M. the King of the Belgians; Professor of Clinical Surgery, and Surgeon to the University College Hospital. From the third and Revised London Edition. With Illustrations. Philadelphia: Henry C. Lea. 1869. For sale by W. B. Keen & Cooke, Chicago.

This is a well executed volume of 359 pages, presenting a full consideration of the subjects Urethral Strictures, and Urinary Fistulas, by an author of eminence and large practical experience.

A Handy-Book of Ophthalmic Surgery, for the use of Practitioners. By John Z. Laurence, F.R.C.S., (University London), Surgeon to the Ophthalmic Hospital, Southworth; Ophthalmic Surgeon to St. Bartholomew's Hospital, etc., etc., etc., etc. Assisted by Robert C. Moor, late Assistant-Surgeon to the Ophthalmic Hospital, Southworth. With numerous illustrations. Second Edition. Revised and enlarged. By J. Z. Laurence. Philadelphia: Henry C. Lea. 1869. Pp. 227. For sale by W. B. Keen & Cooke.

This is an improved edition of a well-known work, and will be found useful in every physician's library.

Editorial.

Criminal Abortions.—The deaths from criminal attempts to procure abortions are disgracefully frequent. Many of them are never known to the public; and, yet, the number that are detected and published are sufficient to make any civilized community blush with shame. Within the last ten days, two cases

have occurred in this city, under such circumstances as to attract the attention of the legal authorities, and to cause investigation. In the first case, the girl was an inmate of a house of ill-fame, and the operation is alleged to have been performed by Henry R. Stratford, claiming the title of doctor. The other appears to have been a servant girl, seduced by some wretch and abandoned. The alleged operator, in her case, was Duncan MacRae, a reckless pretender, who for many years has advertised his ability to cure cancers and all other tumors, etc. In both cases, death followed the operation, in a few days. From the evidence before the Coroner's Jury, it would appear that producing abortions constituted a prominent part of the practice of both the misnamed doctors. They were promptly arrested by the police, have been indicted by the Grand Jury, on a charge of *murder*, and are now awaiting their trial in the Circuit Court. We think their indictment for *murder* is a mistake. Several such indictments have been found against different parties in this city before, but never has one been convicted, no matter how positive the evidence or how mercenary the crime. Neither is there likely to be any convictions on such indictments. The plain fact that the criminals acted without any malice or ill-will towards their victims, but, on the contrary, with the consent and at the solicitation of the latter, with the ability of counsel to present a plausable pretext that the victim died, not from the abortion, but from some accidental inflammation, will always render it difficult to procure a conviction of murder. It seems to us better to try all such cases on the simple charge of producing the abortion, on which they would be certainly convicted, and then inflict the full penalty allowed by the law. A few prompt convictions, even if the penalty was inadequate in comparison with the magnitude of the crime, would do more to suppress the horrid practices of the abortionist than any number of indictments for murder.

Clinical Instruction to Mixed Classes.—It seems that our professional brethren in the colleges and hospitals of Philadelphia, that city of *brotherly love*, have had their sober sense

of propriety and their inate modesty rudely shocked by the appearance of a company of *female* medical students, at the Pennsylvania Hospital. So rude, indeed, has been the shock, that it has called forth a formal protest against such attendance of females in company with the males, signed by the faculties of the Pennsylvania University, the Jefferson Medical College, and the boards of physicians and surgeons of the several hospitals in that city.

The basis of the protest is as follows:—

1. Clinical instruction in practical medicine demands an examination of all the organs and parts of the body, as far as practicable; hence, personal exposure becomes, for this purpose, often a matter of absolute necessity. It cannot be assumed, by any right-minded person, that male patients should be subjected to inspection before a class of females, although this inspection may, without impropriety, be submitted to before those of their own sex. A thorough investigation, as well as demonstration, in these cases, so necessary to render instruction complete and effective, is, by a mixed audience, precluded; while the clinical lecturer is restrained and embarrassed in his inquiries, and must, therefore, fall short in the conclusions which he may draw, and in the instruction which he communicates.

2. In many operations upon male patients, exposure of the body is inevitable, and demonstrations must be made which are unfitted for the observation of students of the opposite sex. These expositions, when made under the eye of such a conjoined assemblage, are shocking to the sense of decency, and entail the risk of unmanning the surgeon, of distracting his mind, and indangering the life of his patient. Besides this, a large class of surgical diseases of the male is of so delicate a nature as altogether to forbid inspection by female students. Yet a complete understanding of this particular class of diseases is of preëminent importance to the community. Moreover, such affections can be thoroughly studied only in the clinics of the large cities, and the opportunity for studying them, so far from being curtailed, should be extended to the utmost possible degree. To those who are familiar with such cases as

are here alluded to, it is inconceivable that females should ever be called to their treatment.

3. By the joint participation, on the part of male and female students, in the instruction and in the demonstrations which properly belong to the clinical lecture-room, the barrier of respect is broken down, and that high estimation of womanly qualities, which should always be sustained and cherished, and which has its origin in domestic and social associations, is lost, by an inevitable and positive demoralization of the individuals concerned, thereby entailing most serious detriment to the morals of society. In view of the above considerations, the undersigned do solemnly protest against the admixture of the sexes, at clinical instruction in medicine and surgery, and do respectfully lay these their views before the boards of managers of the hospitals in Philadelphia.

November 15, 1869.

It will be seen that the protestants make the whole matter a simple question of modesty or propriety. They utter no word against females studying or practicing medicine and surgery, but only against their studying and attending clinical instruction, in compony with the opposite sex. We are satisfied that the position thus assumed is untenable. The *indelicacy*, the impairment of *respect* for the sex, and the danger of *disconcerting* the operator or clinical teacher, in his work, are all propositions that look formidable in prospective, but which vanish when brought practically to the test. The rule on which every every intelligent physician daily rests is, that whatever is *necessary* for the proper investigation of disease and the relief of suffering is neither indelicate nor improper. It is on this broad, plain rule that the profession has justified itself in dissecting dead bodies, in examining the sexual organs of the female, and in admitting students of either sex to all the necessary practises of the clinical wards of public hospitals. If a company of young men can witness examinations and operations on the sexual organs of the female, without indelicacy or impropriety, by what kind of logic can it be maintained that it is indelicate or improper for an audience of females to witness examinations

and operations on the sexual organs of the male? And if such company may witness these things separately, why not together? Each company justifies itself separately by its motive, namely, that of gaining such knowledge of disease as will enable its individual members to alleviate human suffering and prolong human life. And if each is actuated by this motive, and this only, there will be neither more indelicacy or embarrassment in looking together, at one and the same suffering patient, than if they were an hundred miles apart. If actuated by this motive (and it is only this that can justify the presence of either sex at all), the presence of both sexes simply operates as a check to heedless and unnecessary exposures of the sick, and to the indulgence of a propensity to tell *smutty stories* in the lecture-room, which, we are sorry to know, some medical teachers possess.

The moment we admit that there is any question of indelicacy or impropriety in admitting students of either or both sexes to such examinations and operations as are necessary to fit them to practise the profession of medicine, surgery, and obstetrics intelligently and beneficially to the community, that moment we lay the foundation for the claim that each sex must have a doctor of its own gender, and the presence of a male doctor in the bed-chamber of a female patient becomes a sexual impropriety. We do not believe that even Philadelphia modesty and refinement is prepared for such a conclusion. The truth is, that for several years past, females have attended freely clinical instruction, in the same classes with the men, in some of the best hospitals in Europe and America. We understand they are now attending the Bellevue and other hospitals in New York; and when, on a recent occasion, some one offered a resolution opposing their attendance, it was promptly voted down by the male members of the class in Bellevue Hospital.

A few female students have attended regularly the clinics in the Cook County Hospital, in this city, in the same classes with the young men, for two or three years past. Although the clinical instructors of that institution are proverbially modest men, and some of them, at least, unmarried, we have heard no intimation that they had been disconcerted or in the least interfered with in the proper performance of their duties.

While, in the foregoing remarks, we repudiate the idea of indelicacy in the study of medicine, by either or both sexes, we by no means advise females to study medicine or practise it as profession. Of all the secular employments in civilized society, there are very few so little suited to the nature and necessities of woman. The labor, mental and physical, the exposures, at all hours, and in all places, the necessity of being ready for action night or day, in the mansion or the hovel, are all circumstances incompatible with the physical necessities und designs of the sex. We have no sympathy with the modern hub-bub about womans' rights and wrongs. But a few singularly constituted women will study medicine, and the quicker the profession everywhere cease to pay any special attention to them, either by favor or opposition, the sooner will they cease to attract attention or call forth newspaper notoriety.

Extract of ergot for subcutaneous injection is thus made, from a formula recently published: Ext. ergot two parts, alcohol and glycerine, of each, seven parts.

Hippocrates died at the age of 109; Galen lived to be 104; Solon and Thales 100; Zeno 98; Diogenes 88; Plato 94; Lycurgus 85; Sophocles more than 100; Asclepiades also Juvenal 100; Newton 85; Fontenelle 99; Buffon 81; and Voltaire 84.—*Med. Gazette.*

Pruritus Vulva.—It is stated that pruritus vulva is often entirely cured by a lotion consisting of five parts of corrosive sublimate dissolved in 50 parts of alcohol. A teaspoonful of this solution is diluted with a pint of tepid water, and applied as a wash to the parts three times daily.—*St. Louis Medical Archives.*

Warts.—The modern scientific name of this disorder is *Myrmekiasmos*, but the principal point is the surprising rapidity with which an extensive cluster of warts will disappear under the use of arsenic, without any local application whatever. Potassa fusa has been used locally. The warts should be saturated with a solution of equal parts of potassa fusa and water, until the horny growth is dissolved and the papillæ destroyed by this caustic.—*Medical Gazette.*—*St. Louis Med. Archives.*

MORTALITY FOR THE MONTH OF OCTOBER, 1869:—

CAUSES OF DEATH,

Accident, drowned	2	Cyanosis	1	of	1
" crushed by timber	1	Debility	6	Kidneys, Bright's disease of	3
" burned by kerosene	2	" general	2	" " and hemorrhage after confinement	1
" excessive gymnastics	1	Delirium tremens	3	Laryngitis	2
" by fall	5	Diarrhœa	20	Liver, disease of, and dropsy	1
" morphine	1	" and burns of body and arms,	1	" abscess of	2
" run over by truck	1	" chronic	9	" induration of and dropsy	1
" by railroad,	3	Diphtheria	27	" cirrhosis of	1
" thrown from wagon	1	" and scarlet fever,	1	" paralysis of	2
" suffocation	1	Dropsy	6	Lungs, congestion of	5
" scalded	1	Dysentery	14	" paralysis and brain congest'n	1
" injured by water pipe	1	" chronic	3	" hemorrhage of	1
Anus imperforate	1	" acute	1	Manslaughter	1
Anguina	1	" typhoid	1	Measles	2
Apoplexy	8	" and phrenitis,	1	" and diarrhœa	1
" and pneumonia,	1	Entero-colitis	1	Metro-peritonitis, puerperal	2
Ascites	1	" chronic	1	Meningitis	2
Asphyxia	2	Enteritis	8	" cerebro-spinal,	1
Births, premature	28	" acute	1	" tubercular	2
" still	44	Epilepsy	1	Metritis, puerperal	1
" tedious	1	Erysipelas	1	Neck, cancer of	1
Brain, inflammation of	4	" and icterus	1	Nephritis	1
" softening of and cancer	1	Fever, congestive	2	Necrosis	1
Bronchitis & teething,	1	" puerperal	3	Old age	12
Cancer, scirrhus	1	" remittent	5	Occipital bone, depression of	1
" of mammary gland	1	" scarlet	42	Paraplegia from injury to back	1
Caecum, inflammation of and peritoneim	1	" " malignant,	1	Paralysis	2
Cerebritis & paralysis,	1	" " and diphtheria	4	" from intemperance	1
Cholera infantum	31	" typhoid	36	Pericarditis following measles	1
Cirrhossis, hepatic	1	" " and lungs, congestion of	1	Peritonitis	3
Convulsions	45	" " and bowels, mortification	1	Phlebitis	1
" puerperal	2	Gastritis	3	Phrenitis	2
" and teething	1	Gastro enteritis	1	Pneumonia	16
Consumption	44	Hemorrhage from fever sore	1	" typhoid	3
" and dropsy,	1	Hæmorrhage, internal from aneurism	1	" and cholera infantum	1
" and heart, valvular disease of	1	Heart, disease of	2	Pyæmia	3
Croup	21	" " and pneumonia	1	Scrofula	1
" diphtheretic	2	" " and intemperance	1	Spleen, tubercular enlargement of	1
" membranous	5	" hypertrophy of,	1	Stomach, cancer of	1
Cranium, malformation of	1	" organic disease of	1	Suicide	3
Crusta lactia retrocession of,	1	" valvular disease	3	Tabes mesenterica,	24
Cyanch maligna	2	Hepatitis	1		
		Hydrocephalus	6		
		" acute	6		
		Inanition	14		
		Intemperance	4		
		Knee, white swelling			

Teething	7	Trismus	1	Whoop.-cough & brain congestion	1
" and cholera infantum	2	Uræmia	1	" "lungs congestion of	1
Tetanus	1	Uterus, cancer of	2	Unknown	1
Throat, ulcerated sore,	1	" hemorrhage of,			
Tongue, gangrene, malignant	1	"childbirth"	1		
		Whooping-cough	10		
		" "bronchitis	1	Total	597

COMPARISON.

Deaths in Oct., 1869,	597	
Deaths in Oct., 1868,	449	
Increase,	148	
Deaths in Sept., 1869,	814	
Decrease,	217	

AGES.

Under 1	165	20 to 30	64	70 to 80	19
1 to 3	131	30 to 40	41	80 to 90	4
3 to 5	44	40 to 50	19	90 to 100	1
5 to 10	43	50 to 60	24		
10 to 20	29	60 to 70	13	Total,	597

Males,	322	Females,	275	Total,	597
Single,	471	Married	126	Total,	597
White,	594	Colored,	3	Total,	597

NATIVITY.

Bohemia,	1	England,	12	Sweden,	15
Canada,	9	France,	2	Scotland,	2
Chicago, Native,	100	Germany,	74	Switzerland	1
Chicago, Foreign,	216	Holland	2	Unknown,	2
U. S., other parts,	87	Ireland,	57		
Denmark,	5	Norway,	12	Total,	597

MORTALITY BY WARDS FOR THE MONTH.

Wards.	Mortality.	Pop. in 1868.	One death in
1	7	9,094	1299 1-7
2	23	13,074	568½
3	21	15,076	718
4	21	17,796	847⅓
5	51	16,033	314⅓
6	26	13,083	503 1-5
7	50	25,492	510
8	59	15,813	268
9	32	19,297	603
10	12	12,925	1077
11	20	14,340	717
12	85	17,485	205¾
13	19	11,164	587½
14	34	14,839	436½
15	39	21,078	702½
16	18	15,465	396½

Mortality.	
Accidents,	20
County Hospital,	18
Immigrants,	14
Mercy Hospital,	10
Massasoit House,	1
Manslaughter,	1
Protestant Orphan Asylum,	2
St. Joseph Orphan Asylum,	9
Steamer S. Van Epps,	1
Soldiers' Home,	1
Suicide, Poison,	3
Total,	597

THE extract of Calabar bean when instilled into the eye produces contraction of the pupil, but when injected hypodermically, it produces dilatation of the pupil. It has been found to be the best antidote for atrophine. Epilepsy treated by it is not removed or modified. It has given good results in the treatment of chorea.—*Richmond and Louisville Med. Journal.*

ARSENIC IN DISEASES OF THE SKIN.

Thomas Hunt, F.R.C.S., Surgeon to the London Western Dispensary for Diseases of the Skin (*Journal of Cutaneous Medicine*), speaks of arsenic as follows:—We have a remedy for at least one-half of the diseases to which man is subject. Arsenic, therefore, if rightly used, is adapted to the treatment of six out of every seven cases of chronic skin disease which the physician is asked to relieve. Supposing the preparation to be Fowler's solution, he states that it should be carefully administered. *First.* It should be given in divided doses—three doses in 24 hours, simply to avoid an unnecessarily large dose. *Second.* It should be diluted with pure water, or if the case require the influence of antimony, the vinum antimonii, say 35 minims, may be combined with five minims of the liquor arsenicalis, and this may be taken diluted three times a day. *Third.* This dose should be taken with, or immediately *after*, a meal, in order that, being mixed with the patient's food, it may find a ready entrance into the blood, and that the bare possibility of its irritating the mucous membrane of the stomach or bowels may be avoided. Not that there is any danger of mischief, but the patient, aware that he is taking arsenic, may be disabused of all fanciful or imaginary suffering of this kind. *Fourth.* Arsenic acts very slowly, and, therefore, it is best to begin with an average dose, say five minims of Fowler's solution; and this should be increased, not day by day, as was the practice 30 years ago, but two, three, or four weeks should be allowed to elapse before any necessity can exist for augmenting the dose. If an active or severe inflammation of the tunica conjunctiva in *both* eyes should be set up, then the medicine is not to be abandoned in a panic, but the dose may be reduced to four minims, and in a week or ten days the conjunctiva will be less inflamed. During the first week, if the patient has been properly prepared for the course, the disease of the skin will show some amendment; it will be shorn of its strength, and from this time the cure will be easy enough, although it may take weeks, or even months, to effect it entirely. The health of the patient must be closely watched, and the secretions carefully sustained. Above all, the bowels must not be allowed to act sluggishly. In many cases, a full dose of calomel and comp. colocynth pill will be required two or three times a week; and these doses are sometimes essential to the cure.

If the legs, feet, or abdomen become puffy or œdematous, the urine being scanty or turbid, the case will not progress well

until the kidneys are aroused to vigorous action by full doses of spiritus ætheris nitrosi and acetate of potash largely diluted with water. Young children bear arsenic well, and girls about the age of puberty generally bear and require larger doses than adults of either sex. A child of one year old will require about half the dose proper for an adult. Finally, he recommends freshly prepared Fowler's solution, of a light color, as the red lavender, which for some foolish reason is generally mixed with the solution, often becomes stale and nauseous. The best way of measuring the dose is to mix a drachm of Fowler's solution with seven drachms of water, giving 40 minims as the proper dose, representing five minim doses of the original solution; by measuring 40 minims each time, the patient has a better chance of getting the right dose than in the uncertain bulk of *drops* and *spoons.—Medical Record.*

Favorable Result of Transfusion.—*The Boston Medical Journal*, quoting from the *Medical Times and Gazette*, gives the following encouraging account of the result of transfusion:

Professor Landois, of the University of Griefswald, who has interested himself much in the subject of transfusion, after giving a critical account of the most recent publications on the subject, thus sums up, in a recent number of the *Wien. Med. Woch.*, the results that have hitherto been obtained:—1. Transfusion has been performed 99 times in cases of hemorrhage, in eleven of which cases, no successful result was even possible. Of the remaining 88 cases, 65 were attended with success, 20 were unsuccessful, and in 3 the result was doubtful. 2. It has been performed 12 times in cases of acute poisoning, one of these being hopeless. In three the results were favorable, and in eight unfavorable. 3. For various forms of disease attended with exhaustion, it has been resorted to 43 times, the most unfavorable prognosis having been frequently delivered. In these, the results were favorable in 12, unfavorable in 21, and doubtful in 9, while in one case it was a mere desperate experiment. Professor Landois observes that these statistics speak very satisfactorily for transfusion, and that the results would be far more favorable if this almost harmless operation were not usually driven on to the last minute.—*St. Louis Medical Archives.*

The Minute Structure of the Pancreas.—It is generally believed that the structure of the pancreas is identical with that of the salivary glands. M. Giannuzzi has made this organ

the subject of microscopic research, and points out the following differences:—"The excretory ducts of the pancreas have very thin walls, which are covered interiorly by a cylindrical epithelium. They have not the same connections with the secreting vesicles as in the salivary glands, but they establish around them a network composed of very fine tubes, which have no epithelium, and which surround the pancreatic cellules in their meshes. This network may be compared to that of the biliary ducts of the liver. The network of the excretory ducts of the different vesicules which form the same glandular lobule have connections between them, and constitute a common network. The terminal ramifications of the bloodvessels of the pancreas follow, in general, the tracts of the pancreatic ducts. The pancreatic vesicules are without The pavement epithelium of the vesicules is formed of flattened cellules with a nucleus and prolongation."—*Gaz. Hebd.*—*N. Y. Med. Record.*

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